

INTRODUCTION

Timber sales have been performed on State forest and park lands for 88 years since 1911 when the first thinning operation was completed on the Monadnock Reservation in Jaffrey. This first project coincided with the hiring of the first New Hampshire State Forester and the establishment of the State Forestry Department in 1910.

During early times, timber cutting was irregularly scheduled and was primarily related to forest and park improvements as State land was acquired. Major accomplishments included the extensive thinnings, plantings, and other forest improvements performed by the Federal Civilian Conservation Corps from 1933 to 1941, and the salvage between 1939 and 1943 of huge volumes of timber damaged during the 1938 hurricane.

Since 1950, however, timber sales have been regularly scheduled and have become fundamental to the management and maintenance of the timber, wildlife, and other forest resources on State-owned forest lands. Today, there are approximately a dozen or more timber sales initiated each year on State-owned lands.

A typical timber sale involves an exhaustive 46 steps from start to finish, averages over 215,000 board feet, lasts six weeks (once operational), and requires more than 155 man-hours of staff time to complete. Significantly, the most demanding and time consuming portion of each timber sale is the environmental and site analysis, planning, project approval, and layout activities which generally involve almost 70 percent of the total time required for each timber sale.

The key to successful timber sales on State-owned forest lands is the availability of State, Federal, and private resource management specialists to assistance with the extensive planning and review for each project. Each timber sale is a challenge as public demand increases for the development, protection, and utilization of our forest resources. For this reason, this manual has been prepared as a guide as well as a basis for improvement.

This is a working document which includes operational guidelines, examples from active projects, and information developed by our staff and others for use in planning forest operations on public lands. Policy and practices not covered by this document will be in compliance with "Good Forestry in the Granite State" where State Laws and Department objectives permit.

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TIMBER SALES AND THE LAW

The following laws¹ govern timber harvesting activities carried out by the Department of Resources and Economic Development, Division of Forests and Lands on state-owned forest lands:

1.	RSA 79:1	Timber Tax and Stumpage Owner
2.	RSA 206:10	Fish and Wildlife Management
3.	RSA 206:23	Cooperative Fish and Wildlife Programs
4.	RSA 212-A	Endangered Species
5.	RSA 212-B:5	Conservation Programs
6.	RSA 216-A:2	Cooperative Management and Use
7.	RSA 217-A	Native Plant Protection
8.	RSA 227-C:9	Protection of Historic Resources
9.	RSA 227-G:3	Forest Management Responsibility
10.	RSA 227-H:1	Declaration of Purpose
11.	RSA 227-H:2	Protection; Improvement
12.	RSA 227-H:3	Purchase and Provision for Management
13.	RSA 227-H:6	Gifts of Land for Forestry Purposes
14.	RSA 227-H:8	Use of Land for Recreation Purposes
15.	RSA 227-J:6	Operations in Wetlands
16.	RSA 227-J:7	Alteration of Terrain
17.	RSA 227-J:9	Cutting Near Water and Highways
18.	RSA 227-J:10	Care of Slash
19.	RSA 227-L:11	Fire Fighting
20.	RSA 483-B	Shoreland Protection
21.	RSA 541:A:22	Notice to Municipalities
22.	RSA 212:10	Use of Fish and Game Lands
23.	RSA 541-A:14	Agency Action on Applications, Petitions and Requests
24.	RSA 541-A:16	Availability of Adjudicative Proceeding; Contested Cases; Notice, Hearing and Record

The purpose of ownership of state-owned forests and reservations is declared in RSA 227-H:1. Responsibility for management of state-owned forests is provided under RSA 227-G:3 and 227-H:3. RSA 227-H:2 provides for multiple-use management of reservations guided by the principles of sustained yield including planting and harvesting trees. RSA 227-H:8 provides for the use of reservations for recreational purposes and RSA 216-A:2 authorizes cooperative recreational and forestry use. The management of fish and wildlife resources are carried out under the authority of RSA 206:10 and 212-B:5. RSA 206:23 provides for cooperative fish and wildlife management programs. RSA 227-H:2 provides for the protection of reservations from fire, pests and other damaging agents. RSA 227-L:11 directs forest fire wardens to extinguish all forest fires occurring in their towns and provide for the upkeep of woods roads and trails for the passage of men and equipment in case of forest fires. The protection of threatened or endangered wildlife is provided for by RSA 212-A, and threatened or endangered plants

¹ See also Page 44 Timber Sale Policy and Procedures.

by RSA 217-A. Activities that may impact on historic resources are regulated by RSA 227-C:9.

Cutting of trees near water and public highways for forest management purposes is governed by RSA 227-J:9 and the treatment of logging debris and slash under RSA 227-J:10. Permits for and notification of operating in and adjacent to wetlands is required by RSA 227-J:6, and any alteration of terrain or transportation of forest products in or on the border of surface waters is covered under RSA 227-J:7. The removal of vegetation along streams and water frontage for purposes other than forest management is regulated by RSA 483-B.

RSA 541-A:22 requires State agencies notify municipalities of any actions within its boundaries that directly affects that municipality, and RSA 79:1 defines that the purchaser of timber from public lands is responsible for the timber tax to municipalities.

PURPOSE, POLICY AND GUIDING PRINCIPLES FOR TIMBER MANAGEMENT AND HARVEST

PURPOSE

The original State Forestry Commission authorized by the General Court on July 29, 1881 determined in its early years that the purchase and management of State forests in New Hampshire would be justified by four benefits:

- 1. State-owned forests would serve as demonstrations of sound forestry principles.
- 2. Public ownership of sensitive mountain tops, cut conservatively, would retain greater value for their effects on soil erosion and stream flow than for timber production.
- 3. A few small tracts of rare natural beauty could be preserved.
- 4. State would derive revenue from the management of forests which serve the other three purposes.

Additional benefits of state-owned forest lands are recognized today such as: (a) provide for public access and use of natural resources, (b) protect threatened and endangered species, (c) contribute to tourism and local forest economies, (d) preserve historic resources and rural culture, and (e) protect and enhance ecological values including forest health, wildlife habitat, and biological diversity.

Timber management has played a traditional and fundamental role in the maintenance of state-owned forest lands as part of a total forest management program¹ that serves public needs. In recognition of the foresight of the original State Forestry Commission and General Court and current environmental awareness and values, the following policy and guiding principles relate to timber management and harvest of forest products from state-owned forest lands under the jurisdiction of the Department of Resources and Economic Development.

POLICY

Timber management policy is to manage and harvest timber on state-owned forest lands in a productive and ecologically sensitive manner. This policy is guided by consideration of forest

¹ See "State Land Forest Management Program and Development Plan, 1983".

health and productive forest growth², water quality, threatened and endangered species, fish and wildlife habitat, scientific and research values, education, local units of government, neighboring landowners, public interest, historic resources, recreational opportunities, and scenic values.

GUIDING PRINCIPLES

I. Multiple Use

- A. Timber management and harvests will be coordinated with other state, federal, and private natural resource specialists to insure consideration of multiple resource values and user interests.
- B. Timber management practices will be implemented so as to maintain or enhance other resource values.
- C. Public notification will be made for timber harvest **proposals** for public information and response (see Page 27 Forest Operation Notice Guidelines).
- D. Ecological conditions and resources will be sustained that serve public needs such as special habitat for game and nongame fish and wildlife species, timber stands for wood products, and forest areas for recreational opportunities.
- E. Significant remains of prehistoric and historic human activity will be preserved.
- F. Timber management practices adjacent to or within areas frequented by the public for recreation will be modified to protect or enhance recreation values. Roads and trails will be left unobstructed and special care will be taken in regard to slash within sight of roads and trails³.
- G. Areas of scenic value will be managed for the protection of aesthetic qualities. Limited timber cutting will be allowed to improve aesthetics or safety such as: (1) removal of dead, diseased or high risk trees, (2) single tree or group selection for variety in plant size and species, and (3) small clearcuts to open vistas.
- H. Each timber harvesting operation will be planned and executed as a demonstration of sound forest and wildlife habitat management practice.
- I. The use of public roads for logging truck access will be coordinated with the State Department of Transportation and local units of government.

² Forest health and productive forest growth requires in part: (1) protection or enhancement of genetic and species diversity in a variety of physical settings (biodiversity) and, (2) sustaining ecological conditions and resources that serve public needs.

³ Special consideration is also given the Appalachian National Scenic Trail and associated corridor crossing department lands in compliance with Statement of Policy dated April 21, 1989.

II. Forest Health

- A. Timber cutting will be done only where the environment can be adequately protected. Sensitive and fragile soils such as steep slopes and thin soils not suited to a sustained yield of timber crops will not be logged.
- B. Proper management practices⁴ will be used in riparian areas to protect water quality and associated biotic communities, natural runoff patterns, water temperature, and bank and channel stability.
- C. Habitat of threatened or endangered species and areas of ecological significance including vernal pools, critical wildlife habitat, and natural preserve areas⁵ will be protected.
- D. Management practices that allow development of forest areas with a mix of vegetative conditions and types will be used to provide for genetic and species diversity.
- E. The integrity of existing natural communities and habitats of native species will be protected to allow for ecosystem diversity.
- F. Timber management practices will be influenced by nearby land uses, vegetative patterns (see Appendix A), aspect, elevation, land forms, and other factors in consideration of landscape diversity and fish and wildlife habitat.
- G. Preference is given to prevention and control of insect and disease problems through silvicultural means including commercial salvage operations.

III. Maintenance and Protection

- A. Roads used for timber management purposes will be kept to a minimum number and standard considering safety, environmental impacts, and cost.
- B. Public vehicular traffic on State-owned forest land roads used for timber harvesting purposes may be controlled for public safety purposes, to prevent resource damage, to protect roads from damage during periods of wet ground, and provide for nonvehicular recreational opportunities.
- C. Temporary road, skid trail, and log landing design will include consideration for revegetation in order to stabilize soils, mitigate negative visual impacts, and provide for wildlife habitat.
- D. Slash and other logging debris will be treated to promote decomposition and minimize the risk of forest fires.

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⁴ Minimum standards for proper management practices are described in "Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire", compiled by J.B. Cullen, 1990.

⁵ Defined by the N.H. Natural Heritage Inventory Program.

IV. Marketing and Utilization

- A. All interested parties will be provided the opportunity to bid on any proposed timber sale in accordance with procedures adopted by Governor and Council (see Page 33 Timber Sale Rules and Regulations).
- B. A timber sale contract is required for each timber sale detailing timber included and price, method of payment, period of contract, scaling specifications, cutting and utilization standards, logging and skidding restrictions, trucking constraints, site restoration and sanitation requirements, safety and indemnification clauses, and statutory requirements.
- C. Forest management staff routinely inspect and supervise each timber sale while in operation. Operating procedures by the timber buyer are checked to minimize damage and insure proper compliance. Check scales are periodically made to insure proper utilization and scale reporting.
- D. A performance bond is posted by the timber buyer held by the state during the term of the contract to insure proper contract compliance and satisfactory completion of the sale. All timber is paid for in advance of cutting.
- E. All trees designated for cutting and removal will be utilized according to specified utilization standards based on current markets, species, and where tree form and branching permit.

V. Treatments

- A. Each timber harvesting operation will be based upon a detailed management prescription designed to meet specified management objectives (see Page 18 Guidelines for Forest Operation Plans).
- B. Timber management will be consistent with ecological land capabilities, soil and site properties, and area management guides⁷.
- C. Timber is managed on a sustained yield basis emphasizing long rotations and high quality sawlogs.
- D. Evenaged⁸ silviculture is used to: (1) regenerate shade intolerant and intermediately intolerant species such as aspen and paper birch, (2) rehabilitate degraded or sparsely stocked areas, (3) meet wildlife habitat objectives and create medium and course scale vegetative patterns (see Appendix A), (4) prevent the spread of and reduce losses from insects and disease, (5) make infrequent entries into management areas, (6) minimize access road construction, and (7) vista cutting.

⁷ Area management guides described in "State Land Forest Management Program and Development Plan, 1983".

⁸ Evenaged stands result from natural disturbances or timber harvesting which removes all or nearly all trees from a given area at a time. Cutting methods include clearcutting, shelterwood, and seed tree.

- E. Unevenaged⁹ silviculture is used to: (1) regenerate shade tolerant species, (2) maintain continuous forest cover and shade in environmentally sensitive areas, (3) produce a variety in plant sizes and species along trails, roads and other visually sensitive areas, and (4) meet wildlife habitat objectives and create fine scale vegetative patterns (see Appendix A).
- F. Preference will be given natural regeneration of forest regrowth over planting and other artificial methods. Each timber harvesting operation will be part of a regeneration system designed to create conditions favorable for the eventual replacement (sustained yield) of the existing stand with naturally occurring tree species.
- G. Management strives to attain and maintain vegetative composition goals and patterns consistent with ecological land capabilities and soil and site properties through a process called habitat supply analysis (see Appendix B) that permits the integration of wildlife habitat concerns into long-term timber harvest and silviculture schedules.
- H. Site specific wildlife habitat management practices compliment vegetative composition goals within habitat management units (see Appendix B). Site specific practices are considered with every timber harvesting operation and include: release of apple trees, other fruit producers and softwood understory trees; maintenance of snags for food and shelter; identification and reservation of mast, cavity, perch and other critical trees; encouragement of within stand diversity; protection of wildlife travel corridors, water resources, bedding and nesting sites; conservation of winter deer yards; creation of openings in extensive stands; and planning and maintenance of logging roads and landings to benefit wildlife.

TCM 11/15/90 (Revised 95,97,99)

⁹ Unevenaged stands result from the removal of individual trees or groups of trees resulting in the retention of a continuous high forest cover, recurring regeneration, and a variety of plant sizes and species. Cutting methods include single tree and group selection.

LIST OF TIMBER SALE STEPS

Forest Management Bureau, Division of Forests and Lands

FOREST INVENTORY HABITAT MANAGEMENT UNITS SITE & STAND ANALYSIS & PRIORITY SETTING PRELIMINARY AGENCY REVIEW PRESCRIPTION CRUISE COMPUTATION OF CRUISE DATA INTER-DEPARTMENT SPECIALIST REVIEW DRAFT PLANNING REPORT PLANNING REPORT REVIEW FINAL PLANNING REPORT DRAFT FOREST OPERATION NOTICE BUREAU REVIEW OF PLANNING REPORT DEPARTMENT REVIEW OF PLANNING REPORT INTER-DEPARTMENT REVIEW OF PLANNING REPORT FINAL APPROVAL OF PLANNING REPORT FINAL FOREST OPERATION NOTICE & PRESS RELEASE PUBLIC NOTIFICATION LAYOUT AND MARKING COMPUTATION OF MARKED VOLUME PERMIT APPLICATIONS DRAFT PROSPECTUS

PROSPECTUS REVIEW

NOTICE PROCESSING

FINAL PROSPECTUS PROCESSING

DEVELOP MAILING LIST

MAIL TIMBER SALE NOTICES

SHOWING

BID OPENING

BID PACKAGE AND RECOMMENDATION TO STATE FORESTER

1ST LETTER TO BIDDERS WITH BID RESULTS

DIRECTOR REVIEW

COMMISSIONER REVIEW

CONTRACT PROCESSING

2ND LETTER TO BIDDERS WITH BID AWARD

CONTRACT REVIEW WITH PURCHASER

CONTRACT SIGNING AND 1ST PAYMENT

LETTER TO MUNICIPALITIES

SITE REVIEW WITH LOGGER

OPERATION INSPECTIONS

FINAL INSPECTION WITH PURCHASER AND LOGGER

FINAL TIMBER SCALE SUMMARY AND RECOMMENDATION FOR CLOSE-OUT

SUMMARY REPORT REVIEW

BUSINESS OFFICE NOTIFICATION TO CLOSE-OUT PROJECT

RETURN PERFORMANCE BOND

ADJUST INVENTORY DATA AND TIMBER SALE RECORDS

PERIODIC REVIEW

TIMBER SALE PROCEDURES

Under Revision
FOREST MANAGEMENT BUREAU
DIVISION OF FORESTS AND LANDS

October 15, 1990 (Revised 95,97,99, 2000 Also SeePage 44)

1)	SITE & STAND ANALYSIS & PRIORITY SETTING -	Review site and stand factors, resource values and user interests to determine project suitability and priority considering factors as forest condition, habitat supply, species diversity, and landscape patterns.				
2)	PRELIMINARY AGENCY REVIEW -	Contact Fish and Game, Parks and Recreation, Natural Heritage Inventory, and other agencies to review applicable site factors.				
3)	PRESCRIPTION CRUISE -	Collect data by prism sampling, measuring and visual inspection to include:				
		tree species timber volume growth area operability recreation aspect	stocking age wildlife access culture visibility topography	diameter water soils disease insects location vegetation		
	COMPUTATION-	Compute volume, di condition class and s		d stocking by		
5)	INTER-DEPARTMENT SPECIALIST REVIEW -	Review site and preliminary plans with statewide specialists regarding recognition, protection, and/or enhancement of resource values and user interests.				
6)	DRAFT PLANNING REPORT -	Prepare draft plan incorporating information from previous steps and specialists review including:				

history site data stand features basal area desired stocking site goals species quality volume

value permit needs mgt. goals visual goals

protection resource protection schedule recreation goals prescription seasonal restrictions

7)	PLANNING REPORT REVIEW -	Site and plan review by Bureau team to verify plan and determine preliminary layout of project area. Adjustments may require revisit by statewide specialists.
8)	FINAL PLANNING REPORT -	Finalize planning report and maps incorporating changes determined during planning report review. Plan is signed and approved by Regional Forester.
9)	DRAFT FOREST OPERATION NOTICE -	Prepare draft notice describing planned forest operation to be sent to local units of government, conservation commissions, other interested citizens.
10)	BUREAU REVIEW OF PLANNING REPORT -	Administrator, Forest Management Bureau reviews plan and draft Forest Operation Notice for preliminary approval and assignment of project # for project status.
11)	DEPARTMENT REVIEW OF PLANNING REPORT -	Parks and Recreation, Natural Heritage Inventory, and Forests and Lands review and sign off on planning report.
12)	INTER-DEPARTMENT REVIEW OF PLANNING REPORT -	Notice of final plans provided statewide specialists for review and comment prior to final approval.
13)	FINAL APPROVAL OF PLANNING REPORT -	Sign off by Administrator, Forest Management Bureau initiating approval for on-site layout and marking to begin.
14)	FINAL FOREST OPERATION NOTICE AND PRESS RELEASE -	Finalize public notification and location maps, and press release of proposed project.
15)	PUBLIC NOTIFICATION -	Mailing of Forest Operation Notice and public notice press release.
16)	LAYOUT AND MARKING -	Flag or paint areas determined in planning report review, measure, mark (paint), and prism check all trees to be cut, and tally volume by species.
17)	COMPUTATION OF MARKED VOLUME -	Computer processing of marking tally to determine product volume, diameter, and number of trees marked to be cut.

18) **PERMIT APPLICATIONS** -

Necessary permits prepared. If necessary, minimum impact wetland notification drafted for use with Timber Sale Procedure steps 34 & 36. Wetland permit applications greater than minimum prepared and submitted to Administrator, Forest Management Bureau for approval and processing. Driveway permits prepared and submitted by Regional Forester.

19) **DRAFT PROSPECTUS -**

Prepare prospectus to determine administrative and contract specifications including purchaser requirements such as product utilization, contract period, site management requirements, performance bond, payment schedule, and sale completion responsibilities.

20) PROSPECTUS REVIEW -

Regional Forester and Administrator, Forest Management Bureau review prospectus for approval

.21) NOTICE PROCESSING -

Prepare timber sale notice including sale location, estimated volume and product by species, and showing and bid opening dates.

22) **PROSPECTUS PROCESSING** -

The prospectus is typed and reviewed by the Regional Forester before copies are forwarded to Region prior to showing. Several copies are kept in Concord.

24) MAIL TIMBER SALE NOTICE -

Administrator, Forest Management Bureau reviews list of contractors and prospective buyers and selects those dealing in the product or specialty determined in the prospectus and recommended by the Regional Forester; address labels are computer generated.

Notices are stuffed in envelopes, mailing labels affixed, and notices mailed, generally 2-weeks prior to showing.

25) SHOWING -

Regional Forester reviews sale site with all prospective bidders. Prospectus and maps are distributed.

26)	BID OPENING -	Note: At least 10 days are allowed between the showing and bid opening. This allows prospective bidders time to further inspect the sale site, contract requirements, and determine their own estimate of sale volume and value before submitting bid.
		Bids are opened and the highest valued bid is determined; bids are recorded.
27)	BID PACKAGE -	Administrator, Forest Management Bureau prepares recommendation to State Forester indicating successful bidder and recommendations for contract award.
28)	1ST LETTER -	Letter sent to all bidders immediately following bid opening indicating preliminary status of bidding.
29)	DIRECTOR REVIEW -	State Forester reviews bid package for approval, forwards bid package to Commissioner, DRED.
30)	COMMISSIONER APPROVAL -	Commissioner DRED reviews bid package for approval.
31)	CONTRACT PROCESSING -	4 copies of the contract are prepared for: (1) purchaser, (2) DRED business office, (3) Regional Forester, and (4) project file.
32)	2ND LETTER -	Letter is sent to all bidders indicating final status of bidding; bid bonds are returned with this letter. Bond of successful bidder deposited as performance bond.
33)	CONTRACT SIGN-OFF BY - DEPARTMENT	4 copies of contract signed by Commissioner DRED and State Forester and forwarded to Regional Forester for purchaser signing.
34)	INTENT TO CUT FORM -	Intent To Cut and attached minimum wetlands notification form prepared by Regional Forester.
35)	CONTRACT REVIEW WITH PURCHASER -	Regional Forester reviews contract provisions and Intent To Cut form (to be submitted by purchaser) with purchaser.

36) CONTRACT SIGNING & 1ST PAYMENT WITH PURCHASER -

Purchaser signs contract and makes 1st advance stumpage payment. Intent-To-Cut form signed by purchaser and submitted to town; wetlands notification portion of Intent submitted by Regional Forester.

37) LETTER TO MUNICIPALITIES -

Notification is sent regarding the sale of forest products from state land, name and address of purchaser, and volume sold that may be of use to that municipality in connection with the timber tax payable by the purchaser.

38) SITE REVIEW WITH LOGGER -

Regional Forester reviews operating procedures and contract requirements with logger on site. Log landing layout are modified based on equipment needs of logger with site protection constraints.

39) **OPERATION INSPECTIONS** -

Operation regularly inspected for contract and permit compliance; skid trail modifications are made on case-by-case basis; check scales regularly made

40) FINAL INSPECTION WITH LOGGER AND PURCHASER -

Regional Forester inspects sale area and access roads with principals to insure final sale shutdown is properly done and all site and contract obligations are met.

41) FINAL TIMBER SCALE SUMMARY & CLOSEOUT - A final report is prepared noting total cut and value of stumpage removed, and recommendation regarding return of performance bond.

42) SUMMARY REPORT REVIEW -

Administrator, Forest Management Bureau reviews summary report for approval of final sale disposition.

43) CLOSE-OUT NOTIFICATION -

Regional Forester submits final sale close-out authorization for review and approval of Administrator, Forest Management Bureau then forwarded to DRED business office. Authorization includes such items as: billing for payment due, retention of all or portion of performance bond for damages, and stumpage overpayment to be returned

44) RETURN OF PERFORMANCE BOND -

DRED business office requests the State Treasurer return performance bond and any stumpage payment adjustment based upon final summary report and the recommendation of Administrator, Forest Management Bureau.

45) **RECORD ADJUSTMENT -**

Forest inventory data and management records are adjusted to reflect completed operation.

46) **PERIODIC SITE REVIEW -**

Periodic reviews are made on-site to monitor results of project objectives to confirm and/or adjust future management plans, and to utilize the site for demonstration and/or research purposes.

TCM 01/30/83 - revised 10/15/90(Revised 95,97,99,2000)

TIMBER SALE TRACKING SYSTEM

FOREST MANAGEMENT BUREAU DIVISION OF FORESTS AND LANDS

Forest Management Bureau forest operation project tracking system in the Concord office consists of the following:

A. PROJECT LISTING

Sequential project listing by region.

Lists project#, property, contractor, project type, sale date, fiscal year, cut volumes, plan date, summary date, acreage

B. PROJECT STATUS SHEETS

Status sheets for recording step-by-step progress for each active project listed by region.

C. FOREST OPERATION PLANS

Original forest operation plans and maps (see Guidelines for Forest Operation Plans) by region assigned <u>active</u> project status; copies maintained in the Region.

D. PROJECT FOLDERS

File folders for each <u>active</u> project for filing of all project related information during the execution of the project. Includes notices, contracts, payment records, memorandums, correspondence, progress reports, and summary sheets. Duplicate project folders are maintained in the region.

Upon project completion, folders are purged and stored in a closed-out status in the Concord office. After 3 to 5 years the project folder is archived.

E. PERMANENT PROJECT RECORDS

Consists of the original project planning report, maps, and project summary sheet. This information is maintained in the Concord office and is not archived. Duplicate copies are maintained in the region.

F TIMBER SALE DATABASE

Database records of all current projects and contains active and closed out project information including: timber sale mailing list, acreage of project by Town, silvicultural prescription, contract and prospectus information, estimated marked volume and value by species and product, timber sale bid summary, payment status, actual cut volume and value

TCM 10/15/90(Revised 95,97,99,2000)

ADMINISTRATIVE PROCEDURES - CONCORD OFFICE

October 15, 1990(Revised 95,97,99, 2000 Under Revision See Page 44)

- STEP 1 **FOREST OPERATION PLAN SUBMITTAL** Plan submitted by Regional Forester to Concord office and checked for completeness: typed, signed, and submitted with two maps (detail and location) and draft Forest Operation Notice.
- STEP 2 **PROJECT ASSIGNMENT, POSTING, AND FILING** Project number assigned sequentially by Region and posted under (A) Project Listing; (B) Project Status Sheet is initialized; (D) Project Folder prepared and filed (E) Information entered in Timber Sale Database.
- STEP 3 **BUREAU REVIEW** Forest Operation Plan, maps and draft Operation Notice reviewed by Administrator, Forest Management; original placed in (C) Forest Operation Plan binder; (B) Project Status Sheet updated.
- STEP 4 **DEPARTMENT REVIEW** Forest Operation Plan, maps, and draft Operation Notice distributed for departmental review and comment; (B) Project Status Sheet updated.
- STEP 5 **INTER-DEPARTMENT REVIEW** Forest Operation Plan, maps, and draft Operation Notice distributed outside the department for review and comment; (B) Project Status Sheet updated. Project presented to State Land Management team.
- STEP 6 **PROJECT APPROVAL** After successful bureau, department, and interdepartment review and comment, Administrator Forest Management approves and signs original Forest Operation Plan; copy of approved plan and maps returned to Regional Forester; (B) Project Status Sheet updated.
- STEP 7 **FINAL FOREST OPERATION NOTICE & PRESS RELEASE** Final public notification, location map, and press release of proposed project approved by Administrator, Forest Management Bureau.
- STEP 8 **PUBLIC NOTIFICATION** (1) Final Forest Operation Notice distributed to local units of government, conservation commissions, other interested groups and individuals; (2) Following distribution of Operation Notice, a Public Notice is published in local newspaper(s); copies of all public notifications for (D) Project Folder; (B) Project Status Sheet updated.

 NOTE: Public response period minimum of 3 weeks.
- STEP 9 **PERMIT APPLICATIONS** Applications submitted for project permits, e.g. wetlands and driveway permits. Minimum Impact Wetlands Notification Forms prepared by Regional Forester, copy submitted to Concord for filing (D) Project Folder, original to be submitted to Contractor (Purchaser) by Regional Forester at time of contract signing. Wetland permits greater than minimum prepared by Regional Forester, signed by the town, and submitted to Concord for forwarding to Wetlands Board with fee. Driveway permit submitted to DOT by Regional Forester; copies of all permits for (D) Project Folder and Region file; (B) Project Status Sheet updated.

- STEP 10 **PROSPECTUS REVIEW** Prospectus preparation reviewed by Administrator, Forest Management with Regional Forester; Prospectus variable sheet and memorandum of estimated value submitted to Concord office by Regional Forester to be filed (D) Project Folder for preparation of prospectus (Administrative Procedure step 12) for showing; (B) Project Status Sheet updated.
- STEP 11 **NOTICE PROCESSING** Type stencil for notice including information from prospectus, file copy (D) Project Folder
- STEP 12 **PROSPECTUS PROCESSING** Prospectus is typed and reviewed by the Regional Forester before approximately 20 copies are forwarded to the Region; several copies retained in (D) Project Folder.
- STEP 13 **MAILING LIST** Administrator, Forest Management reviews list of contractors and prospective buyers and selects those dealing in the product or specialty determined in the prospectus and recommended by Regional Forester; address labels are generated.
- STEP 14 MAIL NOTICES Notices are stuffed in envelopes, mailing labels affixed, and notices mailed.
- STEP 15 **BID RECORDING FORM** Bid recording form prepared and filed in (D) Project Folder
- STEP 16 **BID OPENING** Bids are opened and compared, with witness from business office to check bids and bid bonds; bid recording form prepared.
- STEP 17 **BID PACKAGE** Administrator, Forest Management prepares recommendation to State Forester indicating successful bidder and recommendations for contract award; package contains copy of notice, prospectus, copy of bids received, and bid recording form; copies filed (D) Project Folder.
- STEP 18 **1ST LETTER** Letter sent to all bidders immediately following bid opening indicating preliminary status of bidding; copies filed (D) Project Folder.
- STEP 19 **DIRECTOR REVIEW** State Forester reviews bid package for approval, forwards bid package to Commissioner, DRED.
- STEP 20 **COMMISSIONER REVIEW** Commissioner DRED reviews bid package for approval.
- STEP 21 **CONTRACT PROCESSING** Once (highest) bidder is approved, contract is typed and copied.
- STEP 22 **2ND LETTER** Letter is sent to all bidders indicating final status of bidding; bid bonds are returned with this letter; copies filed (D) Project Folder.
- STEP 23 **CONTRACT SIGN-OFF** 4 copies of Contract signed by Commissioner and State Forester, signature page filed in (D) Project Folder; signed contract copies forwarded to Regional Forester for contractor signing.

- STEP 24 **LETTER TO MUNICIPALITIES** Notice sent to municipalities regarding sale of forest products from state lands, purchaser's name and address, and volume sold for timber tax purposes payable by the purchaser.
- STEP 25 **PROGRESS REPORTS** Periodic progress reports filed by Regional Forester, copies to business office and filed (D) Project Folder.
- STEP 26 **SUMMARY REPORT** Regional Forester submits final project summary, project values, payment adjustments, and recommendation for performance bond, copy filed (D) Project Folder.
- STEP 27 **SUMMARY REPORT REVIEW** Administrator, Forest Management reviews summary report for approval of final project closeout.
- STEP 28 **MEMO TO BUSINESS OFFICE** Administrator, Forest Management submits recommendations for project closeout to business office; copy filed (D) Project Folder.
- STEP 29 **RETURN OF PERFORMANCE BOND** Business processes request for return of performance bond to contractor; Administrator, Forest Management sends letter to contractor regarding final closeout and disposition of performance bond; copy filed (D) Project Folder.
- STEP 30 **PROJECT HISTORY RECORDED** A. Project Listing is updated and (C) Forest Operation Plan and final project summary is filed under (E) Permanent Project Records.

TCM 10/15/90(Revised 95,97,99,2000)

FOREST OPERATION PLANNING REPORTS

Each forest operation plan consists of the following:

A. PLANNING REPORT B. PROJECT DETAIL MAP C. VICINITY MAP

A. <u>PLANNING REPORT</u>

The following are general guidelines for filling out each item on the project planning report.

(1) Project

Leave blank; to be assigned project status by the Concord office.

(2) Property

Record property name followed by jurisdictional agency in parenthesis, for example, Hirst Wildlife Management Area (F&G).

(3) Date of Project

Record season and year of planned project commencement, for example, Fall/2001.

(4) Location

Record the following:

- (a) stand(s), compartment(s), inventory date
- (b) habitat management unit (HMU) when applicable
- (c) acres by town(s) and county
- (d) map references

(5) Project Description

Record the following:

- (a) name of management practice(s) to be performed
- (b) summary of work to be performed

- (c) timber volume estimates by species
- (d) preferred method of sale
- (e) unusual factors to be considered

For example, Intermediate commercial thinning operation; per unit sale of approximately 150 MBF white pine sawlogs and 75 cords of hardwood cordwood; highway access (driveway) and dredge and fill permits required; prescription and timber marking will be modified to meet visual impact objectives.

(6) <u>Land Use Coordination/Review</u>

Record department land use category and area management zone(s) for proposed project and, standards and area management guidelines to be followed or modified for other resource uses. List affected or interested agencies, bureaus, etc. to be consulted.

Land Use Categories	Area Managem	Area Management Zones			
forest management	scenic	natural reserve			
park management	timber	historic			
agriculture	water	wildlife			
conservation easement	recreation	other			

For example, Land use is forest management; area management zone is timber; timber marking practices will be modified abutting the waterfowl marsh and adjacent to the snowmobile trail; coordinate with Bureau of Off Highway Vehicles and Fish and Game Dept.

Minimum Standards

Although the "Recommended Voluntary Forest Management Practices" as identified in GOOD FORESTRY IN THE GRANITE STATE are met or exceeded, they should be referenced in this section. Any exceptions to the standards should be noted as "except as prescribed under" (list the appropriate section and reason for exception).

An example of an exception might be a road widening project done at the request of a Town for public safety purposes.

(7) NHI Site

Record yes or no. Yes means a Natural Heritage Inventory (NHI) form must be attached and submitted with the plan.

(8) Stand/Area Description

Describe the stand(s) or area(s) the proposed project will encompass to include, but not be limited to, all data and qualities pertinent to present conditions, management objective(s), and prescriptions such as: forest type, size class, site index, stocking, mean

stand diameter, per acre volumes, stand quality, growth, stand maturity and/or age, crown closure or density, damage, understory, and reproduction, etc.

(9) History

Record available information that has been a factor in the present condition of the stand(s) or area(s) including environmental responses or human factors. List past projects or work, if known, if not known, describe past work as best you can.

(10) Soil/Site

Record soil/site qualities influencing management including SCS soil name(s), map symbol(s) if known, soil productivity group, soil habitat, and landform.

The following is a primer for soil habitats and associated landforms to consider.

Soil Habitat	<u>Landform</u>
(a) enriched	(a) depressions/flats
(b) fine till	(b) broad, smooth side slopes
(c) coarse till	(c) hummocks, ridges/undulating
	lower side slopes
(d) wet compact till (pan)	(d) depressions
(e) shallow bedrock, ledge	(e) ridges, knobs
(f) sediment, sandy outwash	(f) flats
(g) disturbed	(g) old agricultural sites, burned areas, etc.

Refer to "Habitat Mapping and Interpretation in New England", USDA Forest Service, Northeastern Forest Experiment Station Research Paper NE-496, W.B.Leak, 1982 for descriptions, species, silvicultural and management implications for soil habitats.

The following are factors affected by soil/site to be briefly described, where appropriate.

- (a) species choice
 - 1. regeneration success
 - 2. growth rate
 - 3. quality
- (b) rotation/structure
 - 1. culmination of bd.ft. MAI lower site => longer rotation
 - 2. stand structure, cutting pattern
- (c) silvicultural risks
 - 1. windthrow
 - 2. fire
 - 3. snow/glaze/frost
 - 4. insect and disease

- (d) silvicultural impacts
 - 1. visual
 - 2. nutrient drawdown
 - 3. wildlife
- (e) operation limits
 - 1. season
 - 2. costs
 - 3. equipment

(11) Roads/trails

Record information relating to logging access roads, existing trails impacted, and log yard(s) needed including but not limited to the following.

- (a) public highways affected by project
- (b) recreation trails impacted
- (c) use permit or ROW needed on abutting property
- (d) access road limits (season, time of day, weight, etc.)
- (e) permits or variances required, such as:
 - 1. RSA 227 -J:9 basal area variance
 - 2. RSA 236:13 public way access permit
 - 3. RSA 482-A fill and dredge
 - 4. RSA 485-A:17 terrain alteration
- (f) road/log yard improvements required before/after project
- (g) construction of new roads, trails or yards required; consider visual impact, public safety, materials and cost

(12) <u>Management Objective</u>

Describe forest/stand management objective(s) for the project area. Management objectives should be consistent with soil/site capabilities and area management guidelines. If necessary describe necessary modifications to area management guides to meet management objective(s).

(13) <u>Management Prescriptions</u>

Describe specific management practices or means by which management objectives will be reached including silvicultural, wildlife, recreation, visual quality, water and soil, construction and other practices. Prescriptions should be consistent with soil/site capabilities and with area management guidelines and, modified, if necessary, for other resource uses. Description should include but not be limited to:

- (a) brief description of work to be performed
- (b) how prescription will achieve management objective(s)
- (c) desired condition(s) or end result(s) of project
- (d) standards and guidelines to be followed/modified
- (e) reference other categories in the planning report impacted by the prescription

(14) Wildlife Impact

Describe potential impacts to wildlife habitat including how the project will advance the property toward its HMU goals (see Appendix B), expected habitat improvements, and any potentially negative impacts on habitat.

Potential habitat impacts include, but are not limited to, increases or decreases in the following:

- (a) hardwood browse
- (b) softwood canopy closure esp. hemlock, spruce/ fir or cedar
- (c) herbaceous forage
- (d) hardwood and/or softwood regeneration
- (e) hard and/or soft mast production
- (f) vertical vegetation diversity (within stand size/age class diversity)
- (g) horizontal vegetation diversity (between stand size/age class diversity)
- (h) vegetative species composition
- (i) overmature vegetative component
- (j) permanent openings

For example: The small clearcuts proposed for stand 1 will increase hardwood regeneration in the unit, as called for in the HMU goals. The proposed selective removal of non-mast-producing hardwoods in the deer wintering area (stand 2, Hemlock 4) will release understory hemlock and increase hardwood browse. Small patch cuts of mature hemlock will stimulate hemlock regeneration, increasing within stand size and age class diversity and improving future winter cover. Softwood canopy closure after the operation will average 60% to 70% across the stand.

(15) Recreation/Visual Impact

Dublia Haa

(a) Describe current public use and visibility of the proposed project area as follows.

Public Use	<u>v isibility</u>
(1) Heavy	(1) High
(2) Moderate	(2) Medium
(3) Light	(3) Low

17: a:1::1:4- x

Briefly mention any nearby foot trails, roads, elevation, aspect, and/or location of the project area, and other factors relating to visibility and public use of the area.

(b) Determine visual impact objective(s) and guideline(s) for the proposed project and describe expected improvements to the visual landscape, and any potentially negative impacts.

<u>Objective</u> <u>Guideline</u>

Protect Management activities restricted.

Retain Management activities either not evident

or partially evident and subordinate to landscape thus maintaining original

landscape character.

Modify Management activities evident, often

natural in appearance, toward a specific visual effect; site restoration work may be

necessary for end result.

Create Management activities are dominant to

landscape resulting in a major visual change. Naturally established vegetative patterns and landforms are utilized where

possible.

Describe, where appropriate, positive elements such as vegetative diversity, unique lands forms, trees or boulders, and scenic overlooks to be utilized or enhanced to meet visual impact objectives.

Describe negative elements such as slash, high stumps, root wads, and other logging or road construction debris to be treated or removed.

- (c) Describe potential impacts to recreation including but not limited to increases or decreases in the following if appropriate:
 - (1) education and demonstration opportunities
 - (2) corridor management
 - (a) plant and landform variety
 - (b) long-range visibility

vistas, background, skyline

- (c) parking areas, turn offs
- (3) hazard reduction; fuels, high-risk trees
- (4) wildlife observations
- (5) public access
- (6) other

For example: Proposed sale area is highly visible from the heavily used Ridge Mtn. trail in stand 3; visual landscape will be modified throughout sale maintaining a continuous tree cover and removing slash 50' from trail; a protected strip will be left between the trail and Trout Brook (see map); hazard trees along trail will be removed and a clearing will

be cut (created) adjacent to the trail (see map) to a rock ledge overlooking a beaver pond increasing wildlife observations; see water/soil controls for restoration work.

(16) Water/Soil Controls

Describe potential impacts to water and soil quality that may result from project operations and accepted management practices and permits required to insure water and soil quality.

Refer to "Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire", compiled by J.B. Cullen, 1990 for erosion control guidelines.

Accepted management practices and considerations include but are not limited to the following:

- (a) filter strips
- (b) cutting practices near water
- (c) slash removal from streams
- (d) stabilization of truck and skidder roads
- (e) stream crossings for truck and skidder roads
- (f) truck roads and skidder trails
- (g) yarding areas
- (h) stabilization of exposed soil
- (i) closure of roads and trails
- (i) closure of borrow areas and yards
- (k) alternatives to seeding yards, roads and disturbed sites
- (1) RSA 227 basal area restrictions

Attach an erosion and sedimentation control plan, if necessary, according to standards and guidelines established for a "Wetlands Board Application".

B. PROJECT DETAIL MAP

An 8 1/2 X 11 inch map should be attached of sufficient scale to identify project detail such as operational units, project boundaries, access roads, yarding areas, slash treatment zones, and other significant project details. This map should have the division's standard title block and acknowledgements and be of sufficient quality for public distribution, i.e. block lettering, no hand lettering, map key, etc.

Larger maps may be reduced to $8\ 1/2\ X\ 11$ inch format provided scale is appropriately changed or noted on the reduced map.

C. VICINITY MAP

An 8 1/2 X 11 inch map should be attached of sufficient scale to show general vicinity of project

relative to towns, public roads, property boundaries, and other general location features to allow locating the project by someone unfamiliar with the area.

D. GOOD FORESTRY IN THE GRANITE STATE

New Hampshire Forest Sustainability Standard Work Team, Recommended Voluntary Forest Management Practices for New Hampshire, (1997)

All Operation Planning Reports will meet or exceed the standards and guidelines presented by the New Hampshire Forest Sustainability Standard Work Team in *Good Forestry In The Granite State*, Copyright 1997. Whenever conflicting needs and objectives become apparent, all reasonable alternatives consistant with State law and the provisions of RSA 227 shall be given consideration.

NOTE: OPERATION PLANNING REPORTS ARE GUIDES TO FOREST OPERATION PLANNING, LAYOUT AND EXECUTION. THEY ARE NOT INTENDED TO BE A COMPLETE PROJECT DESCRIPTION. KEEP YOUR PLANS BRIEF AND CONCISE.

TCM/May 1989 - revised December 1990 May 92, July 97, October 97, March 98, July 98, November 98, May 99, August 2000.

NEW HAMPSHIRE DIVISION OF FORESTS AND LANDS

FOREST OPERATIONS PLANNING REPORT

PROPERTY Bearbrook State Park, Compartment 7

DATE OF PROJECT 1997-98

LOCATION Stand 7, The compartment was inventoried in 1988

TOWN Allenstown

ACRES Approximately 30

PROJECT DESCRIPTION A commercial timber sale of mature white pine. The primary purpose of this operation is to release advanced white pine regeneration, and improve wildlife habitat. This will be a per unit sale encompassing most of stand 7. It is expected to yield 200 MBF of white pine, 11 MBF of mixed hardwood sawlogs, and approximately 150 cords of pulpwood.

LAND USE/COORDINATION/REVIEW Land Use is Forest Management; Zoning is timber. The proposed project has been reviewed by the State Lands Management Team. **NHI SITE** <u>No</u>

STAND/AREA DESCRIPTION *Stand I* is a mature white pine stand approximately 85-90 years old. It is quite variable in nature with stocking ranging from over stocked to understocked. Growth here in the last 15 years has slowed severely. This is also true in areas that are currently understocked. Advanced white pine regeneration exists in scattered areas throughout the stand. This regeneration is approximately 10-15 years old and is overdue to be released. Other areas have very little regeneration due in part to past silvicultural treatment. In addition there is an approximately 2 - 3 acre area that was burned in a wildfire where all of the softwood understory was killed. There are also several areas made up of a mix of white pine and hemlock in the overstory with hemlock regeneration. Following is a summary of the stands key components.

St	and	Treatment	Stand	BA/AC.	Understory	Regen.	Mean	Site	Age	vol./Ac.
	#	Acres	Type	(sq. ft.)	Species	Species	Stand	Index	(years)	MBF
			• •	_	-	_	Dia.		v	
	7	30	WP (5)	100	WP,RM.H	WP,RO,	12"	70 WP	85-90	10.0
					E	RM	(WP-16")			
					B,RO,					

HISTORY This stand was last thinned in 1978 Project P1 - 181. This harvest removed approximately 350 MBF of white pine sawlogs, however this previous sale covered more acreage than the proposed sale area. Total value from the last harvest was approximately \$30,000. The residual stand where thinned has not responded well to release. However there was quite a catch of white pine seed following harvest. This has resulted in very dense white pine regeneration scattered to varying degrees throughout the stand. The area was certainly affected by past agricultural uses in the last century. This is evidenced by the many stone walls inside the stand.

SOIL/SITE As indicated by the 1988 inventory, and taken from the most recent county soil survey the soils in the project are Hinkley Loamy Sand with a 3-8% slope. The soils are well drained and should present no problems during harvest.

ROADS/TRAILS The project area is accessible from the Blackhall Road off of Deerfield Road. An old CCC road runs along the North side of the sale area and will provide excellent truck access. The log landing will be located just off this CCC road approximately 800 feet from its intersection with the Blackhall Road.

MANAGEMENT OBJECTIVE The overall objective of this project is to maintain the present timber type in the project area. The best way to accomplish this, is by releasing the advanced white pine regeneration where it exists while it is still small and flexible enough to withstand harvesting operations. Areas that presently lack regeneration will be thinned down to final stocking with the hope of encouraging it to establish itself in these areas. Areas of mixed hemlock and white pine will be treated to favor hemlock understory as low cover for wildlife. Following harvest the treated area should be a mosaic of white pine regeneration with islands of thinned mature white pine and also islands of mature hemlock with a dense hemlock understory. These islands will range in size from one quarter to one and one half acres in size.

MANAGEMENT PRESCRIPTION *Stand 7:* An overstory removal will be necessary in order to release the existing white pine regeneration. the declining vigor of the overstory precludes a partial cut with the exception of the island areas as noted above. In order to release this regeneration with some degree of certainty that it survives harvesting operations, a mechanical boom harvester will be required. The boom harvester will be required to cut and lay harvested stems in designated skid trails. Conventional logging would almost certainly not result in a favorable outcome.

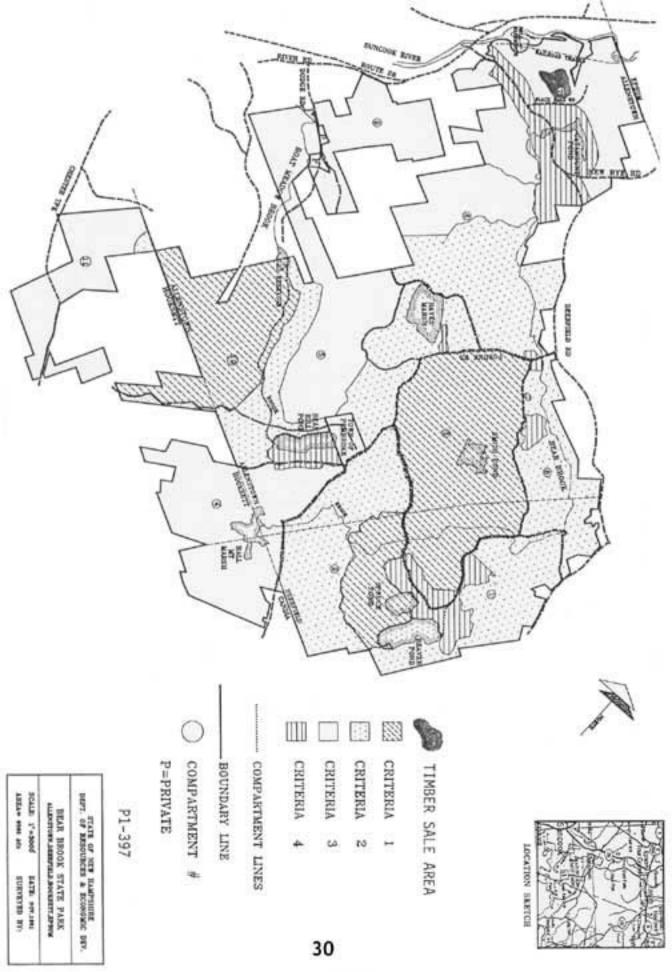
WILDLIFE IMPACT Though not a prime objective, this operation will increase the amount of hardwood reproduction throughout the sale area. This will provide a ready source of winter browse for deer that use the area. In addition the release of low softwood cover should provide a more favorable winter habitat for both deer and small mammals, especially in the "hemlock island areas," where both overstory and understory hemlock will be favored. Existing dead snags and den trees, as well as potential ones, will be left in the harvest area. Scattered red and white oaks will be released in order to provide increased mast production. The landing will be seeded at the completion of the harvest operation to provide a grassy opening.

RECREATION/VISUAL IMPACT The overstory removal will certainly have a visual impact along the Blackhall road and the CCC trail. However some of this impact will be mitigated by the islands of mature timber that will be left scattered throughout the sale area. These islands will serve to "soften" the effect of a large opening. Also by using a boom mounted harvesting system, the existing white pine and hemlock regeneration will be spared, thereby maintaining the "green look" of the forest floor immediately following harvest. In addition a 25 foot buffer strip will be left along the roads mentioned above. In these buffer strips approximately 50 percent of the basal area will be maintained to further soften this operation.

WATER/SOILS CONTROLS There are no streams that need to be crossed within the sale area. Due to minimal slopes and sandy, well drained soils, erosion is of little concern. However all skid trails will be laid out following the Best Management Practices for Erosion Control Manual. At the completion of the operation the log yard will be cleared of all debris, smoothed, and seeded.

10/9/97	The Cleansti	
DATE	FORESTER	
10/9/97	Rayma DM Bin	
DATE	APPROVED, REGIONAL FORESTER	
11/14/98	Jon yrin	
DATE	APPROVED, ADMINISTRATOR FOREST MANAGEM	ENT

11 1



DIVISION OF FORESTS AND LANDS Public Notification and Response

1ST LEVEL - NOTIFICATION

Form: Simple letter (sample attached) from Regional Forester, personally

addressed to chairperson of selectmen with location map.

When: Prior to all timber sales

Target Audience: Selectmen with copies to a broad base of PAI's including: road agents,

conservation commissions, friends groups, abutters, park and regional

managers, district rangers, conservation officers, general public

Purpose: (a) To provide reasonable opportunity for town to submit data, views, or

comments about proposed action within their town boundary that may impact on their town, e.g. fiscal impact or added services required, per

compliance with RSA 541-A:22.

(b) Serve as initial public notice to town prior to newspaper notice.

2ND LEVEL - RESPONSE

Form: Custom response in the form of a phone call, letter, or both from Regional

Forester or other staff, at discretion of Regional Forester.

Helpful hints: (1) focus on process, and (2) give consideration to all inquiries

and complaints.

When: In response to complaint, question or request. RSA 541-A14 requires

response within 60 days - our policy will be to respond immediately. This

level of response may follow the above letter or newspaper notice.

Target Audience: Selective

Purpose: (a) To acknowledge receipt, and: answer questions, request additional

information, notification of any errors, omissions, or misconceptions, or

forward request or complaint to Chief Forest Management;

 $^{^{10}}$ PAI's, or "potentially affected interests", include those who <u>will</u> be affected, those who <u>might</u> be affected, those who <u>think</u> they will be affected, and those who simply <u>want</u> to be involved.

- (b) provide background evidence, authorization and justification for action;
- (c) approve or deny action requested.

3RD LEVEL - INFORMED PUBLIC CONSENT

Form: Format will match situation which may include information pamphlets,

fliers, newspaper articles, letters, etc.

When: In the <u>early planning stages</u> of "Red flag" projects that may be controversial or

misunderstood; may be used as 2nd Level reponse as appropriate.

Target Audience: All "potentially affected interests"

Purpose: To systematically develop informed public consent; communicate purpose

and procedure



STATE OF NEW HAMPSHIRE

DEPARTMENT of RESOURCES and ECONOMIC DEVELOPMENT **DIVISION of FORESTS and LANDS**

172 Pembroke Road P.O. Box 1856 Concord, New Hampshire 03302-1856

603-271-2214 FAX: 603-271-2629

ROBB R. THOMSON Commissioner

PHILIP A. BRYCE Director Selectmen Allenstown Town Office

Allenstown, NH 03275

December 9, 1997

Dear Selectmen:

16 School Street

The Division of Forests and Lands is planning to harvest timber from 30 acres of the Bear Brook State Park in the town of Allenstown, New Hampshire. Attached is a location map of the planned harvests for your reference.

This harvest will require transportation of forest products over Deerfield Road. This is a state highway that is maintained by the town. The Road Agent, James Boisvert, has been contacted to discuss this matter.

We are in the early stages of planning this timber sale, and anticipate offering it for public bidding this winter. This sale is expected to be operated during the summer of 1998. At the time of sale you will be notified as to the volume sold and the successful bidder who will be responsible for the timber tax.

If you have any questions or comments please contact me directly at (603) 271-3456 by January 9, 1998.

This letter is in compliance with RSA 541-A:22, Notice to Municipalities. We would appreciate it if you would post this letter in a public place, thank you.

Sincerely,

Raymond M.Boivin **Regional Forester**

RB/mg cc: Town Conservation

Commission

Forest Protection Forest Management (603) 271-2217 (603) 271-3456



Land Management (603) 271-3456 Information & Planning (603) 271-3457

Natural Heritage Inventory (603) 271-3623

ROBB R. THOMSON Commissioner

STATE OF NEW HAMPSHIRE DEPARTMENT of RESOURCES and ECONOMIC DEVELOPMENT

DIVISION of FORESTS and LANDS

172 Pembroke Road P.O. Box 1856 Concord, New Hampshire 03302-1856

603-271-2214 FAX: 603-271-2629

PHILIP A. BRYCE Director

December 15, 1997

Jim Graham Concord Monitor 1 Monitor Drive Concord, NH 03301

Dear Mr. Graham:

Enclosed is a public notice for printing as soon as possible. Please print in your legal notice section as a single column ad and bill in duplicate, including a tear sheet, to the following address:

> **DRED Business Office** ATTN: Forest Management P.O. Box 1856 Concord, NH 03302-1856

If you have any questions please contact Thomas Miner at 271-3456 between the hours of 8 a.m. and 4 p.m. Monday through Friday.

Thank for your assistance.

Sincerely,

Philip Bryce, Director Division of Forests and Lands

PAB/TCM/mg Enclosure: P1-397

cc: Raymond Boivin, Regional Forester

Forest Protection Forest Management (603) 271-2217 (603) 271-3456



Land Management Information & Planning

(603) 271-3456 (603) 271-3457

Natural Heritage Inventory (603) 271-3623

PUBLIC NOTICE BEAR BROOK STATE PARK

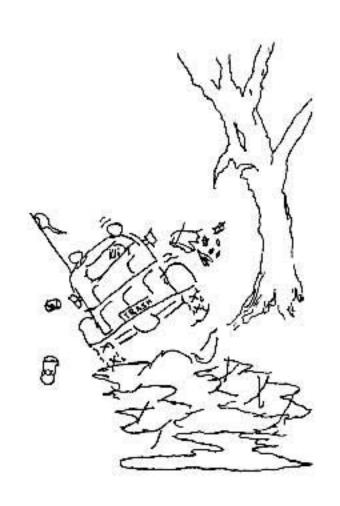
Department of Resources and Economic Development Division of Forests and Lands ALLENSTOWN, NEW HAMPSHIRE

By authority granted under RSA 227-H:2 and 227-G:3 the New Hampshire Division of Forests and Lands is planning a forest operation that includes the commercial harvest of timber on 30 acres of the Bear Brook State Forest in the town of Allenstown, New Hampshire. This is a public notice to solicit comments or questions as part of the planning process. THIS IS NOT A REQUEST FOR BIDS. The Division carries out timber harvests as part of a multiple use forest and wildlife management program on State owned woodlands. Please address written comments or requests for information by January 12, 1998 to Philip A. Bryce, Director, Division of Forests and Lands, P.O. Box 1856, Concord, New Hampshire 03302-1856, ATTN: Forest Management P1-397.



MOTOR
VEHICLES
AND THE
FRANKLIN
FALLS
RESERVOIR

CONTROL
OR
CHAOS?



Do you benefit from the flood control area?

The Franklin Falls Dam and Reservoir project was authorized and built between 1936 and 1943 by the U.S. Army Corps of Engineers as part of a system of flood control for the Merrimack River. Since then, flood prevention has become just one of many uses that the land supports under a management license with the State Department of Resources and Economic Development (D.R.E.D.). How many of the following activities are a part of your life?

- * VIEWING AND HUNTING WILDLIFE, FISHING-The mixture of fields and forests provide excellent habitat for wildlife and game. The Pemigewasset River and its many tributaries represent a broad fishing experience from coldwater brook trout to warm-water pickerel.
- * HIKING-Placement of the Heritage Trail, which runs from the Massachusetts border to Canada, on the Reservoir will enhance the hiking experience which previously had used old roads.
- * KAYAKING, CANOEING, BOATING-The general flat character of the river in this area combined with a few "play" holes make this section of the Pemi popular with boaters of varying abilities.
- * FARMING-Utilization of fertile river-bottom fields by local farmers for cattle and hay is allowed under an agricultural lease policy.
- * TIMBER-Professional forest management by D.R.E.D. produces many varied wood products used by local mills.
- * SNOWMOBILING-Scenic beauty and long expanses of unplowed roads make this a popular area for snowmobilers.
- * BERRY-PICKING-Black and raspberry bushes abound among the foundations of old homesteads.

what is the problem?

Transgressions against the natural beauty, agricultural productivity and public safety due to unlimited motor vehicle access are steadily increasing.

* The Reservoir has become a dumping area for a large array of garbage, including asbestos, cars, shingles, gas tanks, mufflers, furniture, household refuse, etc.. The Army Corps of Engineers and D.R.E.D cannot afford to spend increasing valuable time picking up after people.

- * Agricultural fields are suffering damage by vehicles ruining crops and fences.
- * Roads are being destroyed by vehicles driving on them while they are still wet.
- * Abutters complain of noise and stray bullets from the Flood Control Area affecting their life-style.
- * Legitimate users are feeling threatened by increasing illegal activity.
- * State and local law enforcement officers are hampered from doing their jobs in the Flood Control Area by the labyrinth of minor roads and the open landscape character of the Reservoir.



ANSWER:

A reduction in noise levels will be the biggest advantage to abutters. Other benefits will include less trash on their property from the Reservoir and more peace of mind from a safety aspect.



All lessees will be given keys to give them access to their fields. The closure should eliminate many problems farmers have experienced in the Reservoir, including damage to fences and wheelrutting of fields.

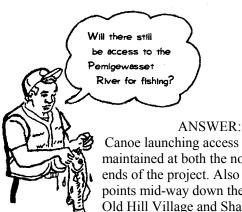


l'm à logger,
Does this mean an end to timber harvesting on the flood control area?

ANSWER:

Timber management will continue to be used as a tool to improve wildlife habitat, regulate tree growth and to provide revenue which will all be targeted for spending only on the Flood Control Areas





Canoe launching access will be maintained at both the north and south ends of the project. Also launching points mid-way down the reservoir at Old Hill Village and Shaw Cove are planned. The rest of the riverbank

will be open for fishing but you will have to walk to get there. Hopefully this will heighten the fishing experience by increasing solitude and decreasing fishing pressure.

> The Reservoir is my favorite hunting spot. Will I still be able to hunt down there?

ANSWER: Hunting will continue as a legitimate use of the Reservoir The gate on Shaw Cove Road will be opened during the months of October and November to allow motorized access to fields where Fish and Game Department stocks pheasants. The Old Route 3A side will remain gated allowing foot access to favorite spots which should increase the thrill and challenge of hunting.

> I'm a selectman in one of the affected towns. How will this affect town services and my constituents?

ANSWER: Keys will be given to appropriate town agencies so they can continue to travel the roads of the Flood Control as needed. A decrease in trash dumping and other illegal activities should ease pressure on local landfills and police services.

What does the state plan to do?

Closure to motor vehicles will be phased-in over a two-year period using a system of existing and proposed gates. These gates will be accompanied by a key distribution system which will allow access for fire protection, law enforcement, forest and wildlife management, and legitimate group uses.

Plans for the first year of implementation are:

- (1) To eliminate unauthorized motor vehicle use on the west side of the river from Old Route 3A between Franklin and Old Hill Village and on the east side on Shaw Cove Road north of the boat launch.
- (2) To develop an alternative to Needle Shop Brook Road for public access to the river from Hill Village. Old Back Road from Hill Village will be upgraded for this purpose.

Plans for the second year are:

- (1) To exclude motor vehicles from the northern half of Old Route 3A
- (2) Develop boat launch and parking facilities at the bridge abutments in Old Hill Village. D.R.E.D in cooperation with the Fish and Game Department will construct a parking area and boat launch site for canoes and small

It sounds like I won't be able to go down mu monster truck up and

ANSWER: Exactly!

Will local fire departments still be able to provide fire protection in the Reservoir?

ANSWER:

Keys will be given to every town within the Flood Control boundaries for fire protection. Limiting vehicle access should lessen fire danger.





ANSWER:

Discussions with law enforcement officials showed us that the closing of the majority of the Reservoir to motor traffic would make their jobs easier by concentrating use and making anyone in vehicles behind the gates subject to arrest.





The Bureau of Off-Highway Vehicles (BOHV) has plans to develop an ATV trail system similar to the successful one created at Hopkinton-Everett Flood Control Area. Concentrating

users on approved trails increases safety and decreases damage to the environment.

What will this plan accomplish?

The goal of this plan is to continue to provide convenient recreation opportunities to legitimate users while discouraging abuse of a valuable public resource. The Department of Resources and Economic Development in agreement with the Fish and Game Department, Department of Safety, and the Army Corps of Engineers feel that many of the problems can be addressed by the phased-in closure to motor vehicles of old Route 3A and Shaw Cove Road. The Reservoir would be opened to handicapped vehicle access by permit, and open to motor vehicles during the hunting season.

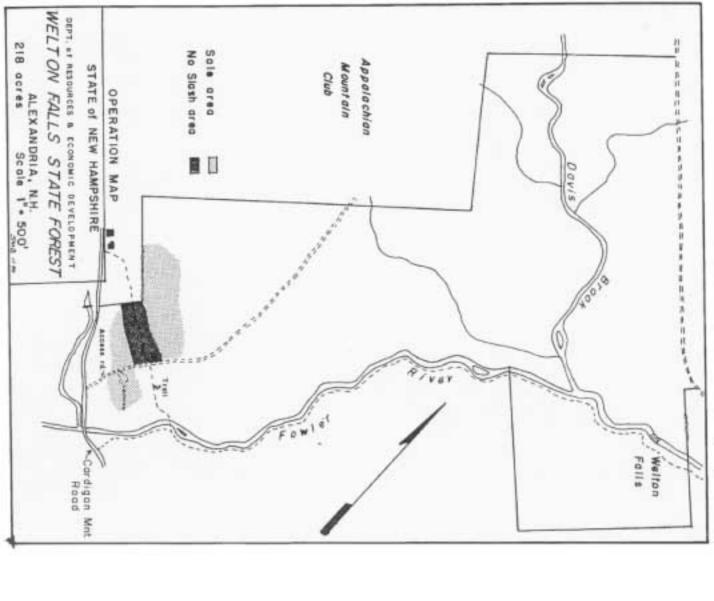
We need your help and cooperation to make this plan work!

For more information, please write or call;

State of New Hampshire
Department of Resources and Economic Development
Division of Forests and Lands
Box 1856
Concord, New Hampshire 03302-1856
(603) 271-3456



Prepared By
Department of Resources and Economic Development
DIVISION OF FORESTS AND LANDS
172 Pembroke Road
Concord, N.H. 03302-0856
In cooperation with:



Welton Falls State Forest Alexandria, NH

A brief look at the timber sale on Welton Falls SF, and why we harvest trees.



Division of Forests & Lands P.O. Box 856 Concord, NH 03302 (603) 271-3456

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elton Falls State Forest totals
218 acres and is managed by
the Department of Resources
and Economic Development (DRED)
Division of Forests and Lands. The
timber sale planned for Welton Falls
adjacent to the AMC Cardigan Lodge is
an example of the active multiple use
forest management that the Division
practices on State-owned woodlands.
The Division recognizes that forests
such as Welton Falls offer many
resources including wildlife habitat,
recreation, esthetics, historical
features, and timber products.

In the planning of forestry projects various resource agencies within the state meet and review each project planned. This ensures that all forest resources and user interests are considered for each forestry project. This multi-agency review was done for the Welton Falls timber sale.

The planning of the Welton Falls timber sale included consideration of recreational use and esthetics of the Norway spruce plantation and red spruce stand. The Manning Trail which runs through these stands is used year round. People who use this area express their fondness for these stands.

A light thinning was conducted in the early '70°. This has been the extent of forest management in this plantation.

So what influenced the decision to thin this plantation and spruce stand now? Would you believe that all of the trees on either side of the Manning trail are the same age despite their size? This is true. The Norway spruce (picea abies) plantation was planted around 1940. The trees grew in size and, as space became limited dominant trees shaded the less dominant trees. This competition slowed the growth of the shaded trees resulting in smaller diameters. If nothing is done the shaded trees die and fall to the

ground. This is already evident. This competition maintains a dense canopy limiting the amount of sunlight

available for the surviving trees and the forest floor (notice there is nothing growing on the ground). Selectively thinning the dense stand increases available space for growing trees so they can maintain healthy growth. Also sunlight reaching the forest floor stimulates the growth of ground vegetation and new trees. Maintaining healthy vigorous trees can prolong the life of the stand.

Horse logging is planned for the Welton Falls timber sale. Although not as common as mechanized equipment, horses are physically and economically well suited to logging small, sensitive

areas such as this. Logging will be limited to (a) late fall when the ground is dry and (b) weekdays so as not to disturb weekend recreation use.

prospective buyers who bid on the hardwood pulp from seven acres. spruce, and 11 cords of softwood and of Norway spruce, 5,200 bdft of red approximately 6,200 board feet (bdft) met. This timber sale will remove make sure that the contract terms are regularly inspected by a forester to details what is to be done. The job is timber sale contract is signed which is awarded to the highest bidder. value of the different species. The bid The prepared sale area is shown to marks the trees to be cut with paint completed and approved a forester Once the planning process has been

If you have any further questions about this timber sale or any other activities which the Division of Forests and Lands is conducting please call our Concord office at (603) 271-3456.



For More Information About The Project

Division of Forests and Lands NH Department of Resources and Economic Development

Concord, NH 03302-1856 P.O. Box 1856

603/271-3456



Division of Parks and Recreation NH Department of Resources and Economic Development

P.O. Box 1856

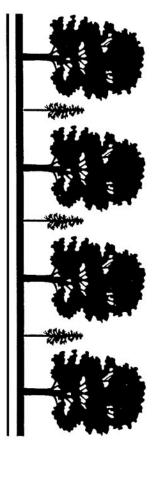
603/271-3556 Concord, NH 03302-1856



Revitalization Project

for the

Group-Use Area Bear Brook State Park





The Bear Brook State Park Group-Use Area

The land that is now the Bear Brook State Park group-use area was once farmland. After the farm was abandoned in the early 1900s, pine seedlings sprouted up in the fields. By the time the Civilian Conservation Corps (CCC) began working in the area in the 1930s, a young pine forest was well established. The CCC cleared trees and built the present group-use shelter building in 1941. A year later, the shelter and the land were turned over to the state to create Bear Brook State Park. Over the past 50 years, millions of visitors have enjoyed picnicking and other activities in this recreation area.

What Will Happen Here?

You may have noticed that many trees in the group-use area have been marked with green paint. These trees have been marked to be removed as part of a revitalization project scheduled for the fall of 1995. In addition to the tree removal, a lawn area will be established around the shelter building and young trees planted in selected locations. The parking area will be resurfaced and a new rail fence constructed along the parking lot. A select few trees will also be removed along the park entrance road to aid in road maintenance.

WAY YOW?

Trees in the group-use area average 90 years of age and have experienced heavy visitor use over the years. Many are showing signs of poor health and weakened condition due to many factors including dry soils and overcrowding. By removing weak and unhealthy trees now, we hope to maintain the health of the remaining trees, and improve long-term recreational use of the area. To avoid disruption with public use of the area, project operations are scheduled to begin after Columbus Day of 1995.

HOW WIll It BE DONE?

Mechanical logging equipment will be utilized to harvest trees in a process known as whole tree harvesting. A portion of the trees to be harvested will be chipped while others will be used as saw logs. Stumps in the more visible areas will be removed by stump granding.

Who Will Do The Work?

The tree harvesting portion of the project will be conducted by a private contractor selected through the state bid process and will be supervised by professional foresters from the NH Division of Forests and Lands. Timber tax (10%) will be paid to the town of Allenstown. The site restoration and cleanup work will be done by the Division of Parks and Recreation and the Design, Development and Maintenance crew.

What Will It Look Like?

During the active project, many large white pine trees will be cut down resulting in a more open appearance of the area. Trees in the immediate vicinity of the shelter building will be removed and the area seeded for grass. Site cleanup and restoration work including planting of young trees and creation of a lawn area next to the shelter building will continue through the spring of 1996. The result will be an attractive recreation area.

Bear Brook State Park

With nearly 10,000 acres, Bear Brook State Park is the largest developed state park in New Hampshire. There are many recreation opportunities in the park including swimming, mountain biking, hiking, fishing and picnicking. For more information about the park call Bear Brook State Park at 603/485-9874 of the NH Division of Parks and Recreation at 603/271-3556.

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TIMBER SALE PROCEDURES AND POLICY (Current, Under Revision) FOREST MANAGEMENT BUREAU DIVISION OF FORESTS AND LANDS

INTRODUCTION

<u>Scope</u>. These policies and procedures as described are used by the Division of Forests and Lands to plan and conduct forest operations on forest lands under the jurisdiction of the Department of Resources and Economic Development.

Statutory authorization and purpose. Under the authority of RSA 227-H, the Division of Forests and Lands cooperatively manages more than 225 state forests, parks, wildlife management areas, and federal flood control areas under management license totaling some 200,000 acres. Approximately half of the acreage is considered suitable for multiple use management that includes timber harvesting. These public lands provide habitat for plants and animals, forested watersheds, protect areas of rare and exemplary natural beauty and ecological value, provide perpetual public access and use, and serve as demonstrations of sound forestry principles.

Definitions.

"Stumpage" means timber in unprocessed form in standing unsevered trees, whether live or dead. The term is also applied to timber that is wind-blown or cut in connection with right-of-way or other clearing, as long as the timber is in place and not cut up into logs or other merchantable units.

"Lump sum" refers to a method of sale for stumpage and timber products based on a total value determined by the bid price for estimated timber volumes with no final value adjustment, upon completion of cutting, for underrun or overrun of actual timber volumes cut.

"Per unit" refers to a method of sale for stumpage and timber products determined by the bid price for estimated timber volumes allowing for a final value adjustment, upon completion of cutting, based on actual timber volume cut. Final settlement is usually determined from mill delivery scale.

TYPES OF TIMBER SALES

<u>Types of Timber Sales</u>. Two general types of timber sales are involved.

- (a) Stumpage sales.
- (b) Sales of forest products produced by state crews, state-hired contract crews or force-account crews.

TIMBER SALE PLANNING AND PREPARATION

<u>Site & stand analysis & Priority setting</u>. Review site and stand factors, resource values and user interests to determine project suitability and priority considering factors as forest condition, habitat supply, species diversity, and landscape patterns.

<u>Preliminary agency review</u>. Contact Fish and Game, Parks and Recreation, Natural Heritage Inventory, Historic Resources, and other agencies to review applicable site factors. Present draft plan to State Land Management Team.

<u>Prescription cruise</u>. Collect data by prism sampling, measuring and visual inspection; determine land capability and desired future condition; evaluate opportunities to enhance other resource values; compute volume, diameter, age and stocking by condition class and species.

<u>Forest operation plan submittal</u>. Plan submitted by Regional Forester to Concord office and checked for completeness: typed, signed, and submitted with two maps (detail and location) and draft Forest Operation Notice.

<u>Draft forest operation notice</u>. Prepare draft notice describing planned forest operation to be sent to local units of government, conservation commissions, other interested citizens.

<u>Project assignment, posting, and filing.</u> Project number assigned sequentially by Region and posted under: Project Listing; Project Status Sheet is initialized; Project Folder prepared and filed; Initial project data entered into computer database.

<u>Bureau review</u>. Forest Operation Plan, maps and draft Operation Notice reviewed by Administrator, Forest Management; original placed in Forest Operation Plan binder; Project Status Sheet updated.

<u>Department review</u>. Forest Operation Plan, maps, and draft Operation Notice distributed for departmental review and comment; Project Status Sheet updated.

<u>Inter-department review</u>. Forest Operation Plan, maps, and draft Operation Notice distributed outside the department for review and comment; Project Status Sheet updated.

<u>Project approval</u>. After successful bureau, department, and inter-department review and comment, Administrator Forest Management approves and signs original Forest Operation Plan; copy of approved plan and maps returned to Regional Forester; Project Status Sheet updated.

<u>Final forest operation notice & press release</u>. Final notification letter with location map and draft press release of proposed project approved by Administrator, Forest Management Bureau.

<u>Public notification</u>. (1) Final Forest Operation Notice distributed to local units of government, conservation commissions, abutting land owners, other interested groups and individuals; (2) Following distribution of Operation Notice, a Public Notice is published in local

newspaper(s); copies of all public notifications for Project Folder; Project Status Sheet updated. NOTE: Public response period minimum of 2 weeks.

<u>Permit applications</u>. Applications submitted for project permits, e.g. wetlands and driveway permits. Minimum Impact Wetlands Notification Forms prepared by Regional Forester, copy submitted to Concord for filing Project Folder, original to be submitted to Contractor (Purchaser) by Regional Forester at time of contract signing. Wetland permits <u>greater than minimum</u> prepared by Regional Forester, signed by the town, and submitted to Concord for forwarding to Wetlands Board with fee. Driveway permit submitted to DOT by Regional Forester; copies of all permits for Project Folder and Region file; Project Status Sheet updated.

STUMPAGE SALES

<u>Marking and Cutting</u>. Trees to be sold will be appropriately marked or designated for cutting, and volume and value estimated by the Division forestry staff. A minimum acceptable bid price will be established and made a part of the record.

<u>Sale Options</u>. Timber may be offered for sale either on a lump sum basis or on a per unit basis, whichever is determined by the Director to be in the best interest of the state.

<u>Prospectus review.</u> Prospectus preparation reviewed by Administrator, Forest Management with Regional Forester; Prospectus variable sheet and memorandum of estimated value submitted to Concord office by Regional Forester to be filed Project Folder for preparation of prospectus (Administrative Procedure step 12) for showing; Project Status Sheet updated.

<u>Notice processing</u>. Prepare timber sale notice including sale location, estimated volume and product by species, and Prebid conference, showing and bid opening dates.

<u>Prospectus processing</u>. Prospectus is typed and reviewed by the Regional Forester before approximately 20 copies are forwarded to the Region; several copies retained in Project Folder.

<u>Mailing list</u>. Regional Forester reviews list of *eligible* contractors and prospective buyers and selects those dealing in the product or specialty determined in the prospectus and recommended by Regional Forester; address labels are generated.

<u>Mail notices</u>. Notices are stuffed in envelopes, mailing labels affixed, and notices mailed to prospective buyers, generally 2-weeks prior to showing.

Stumpage bid package contents. Each bid package contains the following elements.

Prospectus timber sale bid proposal form map of sale area

<u>Prebid conference</u>, showing and distribution of bid packages, Regional Forester reviews Prospectus and sale site with prospective bidders. Prospective bidders shall be asked to sign in and to

provide the name of the individual or company they are representing before the stumpage bid packages are distributed.

Note: At least 10 days are allowed between the showing and bid opening. This allows prospective bidders time to further inspect the sale site, contract requirements, and determine their own estimate of sale volume and value before submitting bid.

BID PROCEDURES

Bid Procedures.

- (a) For sales consisting of timber volumes involving estimated stumpage values up to \$6,000, Bids will be solicited from Purchasers, usually not less than three in number.
- (b) For sales consisting of timber volumes involving estimated stumpage values exceeding \$6,000, a timber sale prospectus will be prepared and distributed at a timber sale showing. Timber sale notices will be mailed to all known potential Purchasers within a reasonable transportation area. A mailing list of prospective Purchasers will be maintained. All interested parties will be given the opportunity to bid on state timber sales. Newspaper advertising will be utilized if deemed necessary.
- (c) All bidders shall complete a "timber sale bid proposal," as provided in the bid package included with the Prospectus.
- (d) All information provided on the "timber sale bid proposal" shall be type written or printed legibly.
- (e) Bidders shall provide on the "timber sale bid proposal" the following information:
 - (1) the name of the bidder;
 - (2) the bidder's address and mailing address;
 - (3) the name and address of the company the bidder is representing if different than the bidder;
 - (4) the offered price for the advertised timber;
 - (5) the bidder shall sign and date both bid forms and return the forms in the envelope provided.
- (f) All bidders submitting a bid shall enclose a certified or cashier's bank check in the indicated amount to serve as "bid bond".
- (g) In the event that no bids are received, the Director, Division of Forests and Lands, with the approval of the Commissioner, Department of Resources and Economic Development, may

negotiate the timber sale under terms considered to be advantageous to the state.

Receipt/storage of bids. Returned bids will be marked as to date of receipt and stored in a secure place by the business administrator, Department of Resources and Economic Development. Bids will be so identified and remain unopened until specified time. If a bid is opened accidentally, the party doing so will promptly re-seal the envelope with the bid inside and note the circumstances on the envelope.

<u>Bid recording form</u> - Bid recording form prepared and filed in Project Folder.

<u>Bid openings</u>. Bids will be publicly opened on the appointed date and time at the Division's Concord office. Bids are opened and compared, with witness from business office to check bids and bid bonds; each bid will be recorded on the bid recording form. Items of interest will be announced as desired.

<u>Handling of Opened Bids</u>. Bids will be made publicly available to participants during the opening and reading. Bids will be sequestered after the opening until the award is made, where upon they will once again become publicly available.

<u>Bid package</u>. Administrator, Forest Management prepares recommendation to State Forester indicating successful bidder and recommendations for contract award; package contains copy of notice, prospectus, copy of bids received, and bid recording form; copies filed to Project Folder.

<u>Procedure for Awarding the Sale</u>. The sale will be awarded to the highest eligible bidder upon the recommendation of the Director, Division of Forests and Lands and with the approval of the Commissioner, Department of Resources and Economic Development, with the state reserving the right to reject any and all bids as described under <u>Procedure for Bid Rejection</u>.

Final award of the sale is made only after all administrative and contractual obligations have been met by the selected bidder.

Appeals from Award. The process for all appeals shall be as required by: RSA 541-A:14 Agency Action on Applications, Petitions and Requests and RSA 541-A:16 Availability of Adjudicative Proceeding; Contested Cases; Notice, Hearing and Record.

<u>1st letter</u>. Letter sent to all bidders immediately following bid opening indicating preliminary status of bidding; copies filed Project Folder. Letter to successful bidder specifying obligations to be met by selected bidder.

INFORMATION REQUIRED

The following is be required of the successful bidder before the bid award is made:

1. <u>Statement of designation</u> indicating status of Purchaser's organization.

Required of the successful bidder before contract is signed:

- 1. <u>Certificate of existence</u> from the New Hampshire Secretary of State's Office. (if applicable)
- 2. <u>Certificate of vote</u> Corporate resolution authorizing an individual to sign on behalf of the company. (if applicable)
- 3. Corporate letter listing officers (if applicable)

<u>Director review</u>. State Forester reviews bid package for approval, forwards bid package to Commissioner, DRED.

<u>Commissioner review</u>. Commissioner DRED reviews bid package for approval.

Contract processing. Once successful bidder is approved, contract is typed and copied.

<u>2nd letter</u>. Letter is sent to all bidders indicating final status of bidding; successful bidder is notified of acceptance of his bid; bid bonds are returned to unsuccessful bidders with this letter; copies filed Project Folder. Successful bidder is advised of obligations to be met prior to project start up.

<u>Contract sign-off</u>. 4 copies of Contract signed by Commissioner and State Forester, signature page filed in Project Folder; signed contract copies forwarded to Regional Forester for contractor signing.

<u>Procedure for Bid Rejection</u>. The Director may reject any or all bids for any of the following causes:

- (a) Any fault of the Division in the preparation of the bid package.
- (b) bidders failure to follow bidding procedure as outlined in timber sale prospectus. Required actions include but are not limited to the following:
 - (1) bidders failure to submit a certified or cashier's bank check in the correct amount.
 - (2) bidders failure to bid on a per thousand board feet (MBF) or other price per unit of product basis as specified on the bid form.
 - (3) bidders failure to sign bid in ink.
 - (4) bidders failure to submit a legible bid or failure to complete the form showing a specified amount bid for each item.
 - (5) bidders failure to submit bid by specified deadline.
- (c) bidders inability to conduct the harvesting operation in a manner that meets the stated objectives

in the bid. Bidders ability shall be determined on the basis of:

- (1) bidder's utilization standards must meet or exceed specified minimums;
- (2) bidder must show evidence of ability to procure a performance bond, liability insurance, and workers' compensation insurance as required;
- (3) bidder must show evidence of having the necessary equipment, markets and personnel required to accomplish the harvest as specified in the bid;
- (4) bidder's prior history of inability to satisfactorily meet the requirements of a Timber Sale Contract and Agreement for any reason.
- (d) Suspension of bidding privileges by Commissioner, Department of Resources and Economic Development, due to bidders history of failure to perform contract, or of unsatisfactory performance of contract terms;

ADMINISTRATION OF CONTRACT

<u>Performance Bond.</u> A performance bond will be required of the successful bidder in a sufficient amount. This bond will be refunded upon satisfactory completion of the operation. The bid bond may be applied as part or all of the performance bond.

<u>Contract Required</u>. A timber sale contract is required and will be prepared for approval and signature of the Purchaser, Director, Division of Forests and Lands, and Commissioner, Department of Resources and Economic Development, with copies being distributed to appropriate parties.

<u>Insurance Required</u>. The Purchaser shall, at its sole expense, obtain and maintain in force and shall require any subcontractor or assignee to obtain and maintain in force, both for the benefit of the State the following insurance:

Comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$ 250,000 per claim and \$ 2,000,000 per incident; and workers compensation insurance as required under RSA 281-A. Any employer not subject to the provisions of RSA 281-A shall provide such proof of exemption to the provisions of as deemed acceptable by the Director, Division of Forests and Lands. A certificate of insurance listing the State of New Hampshire, Division of Forests and Lands as certificate holder for all required insurance, shall be on file with the Division prior to start up of the operation.

<u>Contract review and signing by Purchaser</u>. Project forester reviews contract provisions, permit requirements, insurance certificate requirements and intent to cut form with Purchaser. Purchaser signs contract and makes 1st advance stumpage payment.

PROJECT ADMINISTRATION

<u>Start up Requirements</u> The following is required before project is started:

- 1. Insurance certificates as required above under Insurance Required
- 2. <u>Status of assignment, delegation and subcontractors</u>. Prior to start up, a complete list of assignees, delegates and or subcontractors must be submitted to the Director for review and approval.
- 3. Cutting schedule and designation of person responsible for supervision. At the request of the Agent of the State the Purchaser shall submit a written cutting schedule and include a designation of who shall be responsible for on-site, day-to-day direction and supervision of Purchaser's operation, prior to start up. Cutting schedule shall include: Anticipated start up and completion date; Any anticipated work activities to be conducted outside of "normal working hours". For this purpose "normal working hours shall be considered to be between the hours of 6:00 am and 6:00 pm.

<u>Contract Amendments</u>. Contract amendments other than price adjustments and payment schedule changes can be effected by a one page document signed by the regional forester and the Purchaser.

Price Adjustments, Changes in Payment Schedule. Prices may be adjusted or the payment schedule may be changed upon the recommendation of the Director, Division of Forests and Lands, and with the approval of the Commissioner, Department of Resources and Economic Development. Prices may be adjusted when: (a) There is an obvious error in the accepted bid price. (b) The Purchaser expresses and interest in utilizing a species or product not included in the Contract and Agreement or is outside the specifications as listed in the utilization standards. (c) Due to unforeseen circumstances outside of the control of the Purchaser or the state, the agreed upon price would cause the Purchaser to suffer such financial loss as to cause undue hardship.

Changes in payment schedule may be made when due to weather, market conditions, or other condition outside the control of the state or Purchaser, the cutting and trucking of the agreed upon stumpage is significantly delayed and would cause the Purchaser to suffer such financial loss as to cause undue hardship.

<u>Letter to municipalities</u>. Notification is sent regarding the sale of forest products from state land, name and address of Purchaser, and volume sold that may be of use to that municipality in connection with the timber tax payable by the Purchaser.

<u>Site/project review with Purchaser/logger</u>. Project forester reviews operating procedures and contract requirements with Purchaser or his Agent and or logger on site. Log landing layouts may be modified based on equipment needs of logger with site protection constraints. At the request of the Agent of the State, the Purchaser shall submit a written cutting schedule and include a designation

of who shall be responsible for on-site, day-to-day direction and supervision of Purchaser's operation. Regional Forester shall verify that all required permits have been approved and required insurance certificates are in the project file prior to start up.

<u>Payment Requirements</u>. If the timber is offered on a lump sum basis, payment may be requested in installments or in a lump sum. On a per unit sale, payments may be made on a periodic basis as cutting progresses. Payment for timber shall be required in advance of cutting.

<u>Check Handling</u>. Stumpage checks and supporting scale slips are mailed directly to the regional office by the mill or Purchaser of the stumpage. When the check is received, the following information is recorded on a Division of Forests and Lands MEMORANDUM.

Tract Date
Project Number Purchaser
Check Number Amount

Signature of Forester

Check shall be attached to memorandum and forwarded to Concord Headquarters. The check and original memorandum are identified for deposit to appropriate account by Forest Management Administrator and forwarded to DRED Business Office. Photocopies of check and NCR copies of memorandum are placed in Concord and Regional project files.

Reporting Timber Cut. The Purchaser will be directed to provide the state with a timber cut tally based upon the Official Scale Rules or as agreed upon in the Timber sale Contract and Agreement. Scale slips shall be submitted on a timely basis as required under <u>SCALING</u> in the Timber Sale Contract and Agreement.

Official Scale Rules. The international 1/4 inch kerf rule shall be the basis of measure for all advertised sawlogs. The standard 128 cubic foot cord or its weight equivalent shall be the basis of measure for cordwood and the standard 2,000 pound English ton shall be the basis of measure for chipwood. A Purchaser may use another rule only with approval of the Director, Division of Forests and Lands. If bidders are permitted to bid on the basis of another scale rule, they shall also be requested to convert their bid to official scale rule. If they do not make such conversion between their preferred scale and official scale rule, the decision of the Director, Division of Forests and Lands, will be final in comparisons of scales and bids.

<u>Check Scaling and Stumpage Sale Progress Report</u>. The Project Forester shall perform check scales at his discretion to insure accurate reporting of scale by the Purchaser. A Stumpage Sale Progress Report shall be prepared for the project file whenever necessary or an extended shut down of the operation is anticipated.

<u>Project shutdown.</u> The Agent of the State reserves the right to interrupt (stop) any phase of the operation if, in the Agent's judgement, damaging water, mud, snow or erosion conditions dictate such action or the Purchaser is not in compliance state law department rules or Contract requirements.

<u>Final inspection with logger and Purchaser</u>. Regional Forester inspects sale area and access roads with principals to insure final sale shutdown is properly done and all site and contract obligations are met.

<u>Final timber scale Summary & closeout</u>. A final report is prepared noting total cut and value of stumpage removed, and recommendation regarding return of performance bond.

Notice of project completion to Town. A notice of the project completion and a copy of the final timber scale shall be sent to the town officials and Department of Revenue Administration prior to return of the performance bond.

Normal Yield Tax and Report of Wood Cut. As defined under RSA 79:1, the Purchaser of stumpage on public lands becomes the "owner" and is responsible for filing the "Report of Wood Cut" form and paying the Normal Yield Tax as required in RSA 79:3.

<u>Summary report review</u>. Administrator, Forest Management Bureau reviews summary report for approval of final sale disposition.

<u>Close-out notification</u>. Regional Forester submits final sale close-out authorization for review and approval of Administrator, Forest Management Bureau then forwarded to DRED business office. Authorization includes such items as: billing for payment due, retention of all or portion of performance bond for damages, and stumpage overpayment to be returned.

<u>Return of performance bond</u>. DRED business office requests the State Treasurer return performance bond and any stumpage payment adjustment based upon final summary report and the recommendation of Administrator, Forest Management Bureau.

PROCEDURES FOR SALE OF TIMBER PRODUCTS BY STATE-HIRED CONTRACT CREWS OR FORCE ACCOUNT CREWS

General Procedures. The same categories of value specified for stumpage sales will apply to sales of timber products by state-hired or force account crews with the \$6,000 limit being based on stumpage value as defined by RSA 79:1. The bidding and contract procedure will be similar to that outlined for stumpage sales.

PROCEDURE FOR SUSPENSION OF BIDDING PRIVILEGES

Suspension of bidding privileges In the event of failure to perform the contract by the contract termination date or, repeated failure to comply with contract terms and provisions after notification under paragraph H. in the Timber Sale Contract and Agreement, the Commissioner, Department of Resources and Economic Development, at the recommendation of the Director, Division of Forests and Lands, may suspend a Purchaser from bidding. Reasons for suspension include but are not limited to the following:

- (a) bidders failure to complete all required actions to comply with timber sale contracts and agreements; required actions include but are not limited to the following:
 - (1) fire suppression, fire prevention, and the disposal of slash;
 - (2) protection of soil, water, wildlife, cultural, and timber resources and protection of improvements when such failure causes significant environmental, resource, or improvements damage;
 - (3) removal of designated timber when such failure causes substantial product deterioration or conditions favorable to insect infestations;
 - (4) payment of monies due including payment of damages as a result of timber operations;
 - (5) reporting of timber products and volumes cut;
 - (6) performance of contract by the contract termination date;
 - (7) any other action so serious or compelling that it affects the present responsibility of the bidder;
- (b) bidder's conviction of or civil judgement for:
 - (1) violation of state timber tax, harvest or environmental laws;
 - (2) theft, forgery, bribery, embezzlement, falsification or destruction of records, making false statements, or receiving stolen property;
 - (3) any other offense indicating a lack of business integrity or honesty that seriously and directly affects the present responsibility of the bidder;
- (c) any other reason deemed contrary to proper forest management as defined under RSA 227-G:2.

<u>Period of Suspension</u>. (a) Suspension of bidding privileges shall be commensurate with the seriousness of the cause(s). Generally, suspension of bidding privileges shall be up to five years. The Director may extend the bid rejection period for an additional period if determined that an extension is necessary to protect the states interest.

<u>Failure to Comply with Contract Terms and Provisions</u>. Purchasers whose performance is deemed unsatisfactory, or are not in compliance with the provisions of Division timber sale contracts and agreements will be notified within 15 working days. If the unsatisfactory performance adversely effects the best interest of the State, the Forester or Forest Technician supervising the operation may take immediate action and order a cessation of all harvesting activities. If the Purchaser fails to take corrective action within a reasonable period of time, the Division will provide to the Purchaser, in writing, those actions deemed necessary by the Division, to meet the performance requirements or attain compliance with contract provisions. The Purchaser shall be notified of the expected completion date for all required corrective action.

<u>Notification</u>. Purchasers not completing the required remedial actions within the proscribed time, will be notified in writing that future bids may be rejected for a period of five years as determined by the Director. If the seriousness of the non compliance is sufficient for suspension the Purchaser shall be notified in writing of the length of the suspension of bidding privileges.

<u>Reinstatement</u>. The Purchaser assumes all responsibility for requesting reinstatement by the Director, Division of Forests and Lands once the period of ineligibility has expired. For determining eligibility, the decision of the Director, Division of Forests and Lands shall be final. The Director may extend the bid rejection period for an additional period if determined that an extension is necessary to protect the states interest.

PURCHASER'S LEGAL DESIGNATION

Please complete and return the following information so that we may proceed with your bid acceptance and award consideration for the P#-### timber sale on the XXXXXXX State Forest in XXXXXXX, New Hampshire. Additional information may be requested, based upon your response.

Plea	ase type	or print clearly, thank	you.					
NAN	ИЕ							
BUS	SINESS	NAME						
CITY/TOWN								
HOME					ADDRESS			
CITY/TOWN								
DES	SIGNAT	ION (select All which a	apply to you	your organization)				
		Individual		Government				
		Sole Proprietor		Estate or Trust				
		Partnership		Corporation				
		Non-Profit (attach copy of exemption)						
	•	alty of perjury, I decl the best of my knowl		e information provided ef.	d is true, correct &			
NAN	ΛΕ & ΤΙ΄	TLE (print or type)						
TEL	EPHON	NE.						
SIGNATURE				DATE				

February 22, 2001

High Bidder Company Name Address City, State, Zip

Dear Mr. Bidder:

Enclosed you will find a summary of the bids received on our timber sale, PX-XXX, on the XXXXXXXX State Forest. I have recommended that your bid be accepted.

The attached form must be completed and returned to this office so that the final award can be made. As soon as the information is received and the bid is awarded, you will be notified.

Thank you for your interest in our sales.

Sincerely,

Thomas Miner, Administrator Forest Management

enclosures

TM/mg

cc: Regional Forester
DRED Business Office

February 22, 2001

High Bidder Company Name Address City, State, Zip

Dear Mr. Bidder:

Your bid on our recent timber sale, PX-XXX, on the XXXXXXXX State Forest has been accepted. Your deposit with bid will be deposited as a performance bond.

Our Regional Forester, Mr. XXXXXXX will make an appointment with you as soon as the contract is ready for signing.

Please be advised that at the time of signing of the Contract, a copy of the appropriate insurance policy or policies must be provided for our files as required under Prospectus section (12) <u>SAFETY; INDEMNIFICATION</u>.

We appreciate your interest in our sales.

Sincerely,

Thomas Miner, Administrator Forest Management

enclosures

TM/mg

cc: Regional Forester
DRED Business Office

TIMBER SALE BID AWARD INFORMATION SHEET

The following information shall be required of the successful bidder prior to start up of timber sale operations. (*Please note that some requirements are applicable only to corporate entities*)

Required before award is made:

1. STATEMENT OF DESIGNATION indicating status of Purchaser's organization.

Required of corporate entities before contract is signed:

- 1. CERTIFICATE OF EXISTENCE from the Secretary of State's Office (if applicable)
- 2. CERTIFICATE OF VOTE Corporate resolution authorizing an individual to sign on behalf of the company (if applicable)
- 3. CORPORATE LETTER LISTING OFFICERS (if applicable)

Required before project is started

- 1. INSURANCE CERTIFICATES (as required under ADMINISTRATION OF CONTRACT *Insurance Required*)
- 2. STATUS OF ASSIGNMENT, DELEGATION AND SUBCONTRACTORS Prior to start up, a complete list of assignees, delegates and or subcontractors must be submitted to the Director for review and approval.
- 3. CUTTING SCHEDULE AND DESIGNATION OF PERSON RESPONSIBLE FOR SUPERVISION At the request of the Agent of the State the Purchaser shall submit a written cutting schedule and include a designation of who shall be responsible for on-site, day-to-day direction and supervision of Purchaser's operation. Cutting schedule shall include: Anticipated start up and completion date; Any anticipated work activities to be conducted outside of "normal working hours". For this purpose "normal working hours shall be considered to be between the hours of 6:00 am and 6:00 pm.

Other useful Information

- 1. TAXPAYER IDENTIFICATION NUMBER AND STATUS The Department of Resources and Economic Development, Division of Forests and Lands is an agency of the State Of New Hampshire and has <u>Exempt</u> status. The tax Identification Number is: 02-6000618.
- 2. STATE OF NEW HAMPSHIRE INSURANCE While in the performance of their duties, Employees of the Division of Forests and Lands are covered for Workers Compensation by the State of New Hampshire. Motor vehicle liability insurance for vehicles owned by the State of New Hampshire is provided through a contract with a private insurance carrier. State employees using private vehicles in the performance of their duties must provide proof of liability insurance in order to be reimbursed.
- 3. PERSONAL PROTECTIVE EQUIPMENT While in the performance of their duties, Employees of the Division of Forests and Lands are provided with, and required to wear appropriate protective equipment while on active logging operations.

APPENDIX A

NATURAL DISTURBANCE PATTERNS AND TIMBER HARVESTING

A wide scale of natural disturbances occur in forests from the toppling of single trees to the leveling of large areas resulting from sweeping winds or fire. Each level of disturbance affects a series of changes in the forest ecosystem.

Frequent small disturbances in the forest canopy create fine-scale patterns of small openings that perpetuate a forest of shade-tolerant trees of uneven ages. An example would be the toppling of a single tree creating an opportunity for smaller trees, suppressed below, to fill the opening.

In contrast, larger, less frequent disturbances create coarser-scale patterns of larger openings that produce forest areas of shade-intolerant tree species of relatively even ages. Typically, a damaging forest fire or heavy winds demonstrate this type of disturbance.

In between these two extremes are the medium-scale disturbances from the likes of mild wind or ice storms where small groups or medium sized patches of disturbances create medium-scale patterns of relatively even aged trees of varying shade tolerances.

In a managed forest landscape, selection cutting is a management system (tool) for maintaining diversity on a fine-scale, because the habitat disturbance created is small, like the toppling of an individual tree. Clearcutting, in contrast, removes all or almost all trees from a given area at a time, and produces larger, coarse-scale disturbances. In between, group selection, patchcuts, shelterwood, and seed tree cuttings are similar to mild wind or ice storms and disturb groups and clumps of trees and may leave partial cover of residual trees for shade or seed resulting in medium-scale disturbances

Any given forest landscape may have a blend of disturbances including frequently occurring fine-scale disturbances all the way to the less frequent coarser-scale disturbances. The degree, frequency and distribution of these disturbances create a spatial mix of vegetative communities of numerous sizes and ages. In general, the greater the spatial pattern (spatial heterogeneity¹) the greater the potential diversity of habitat for living organisms.

¹ Hunter, M.L., Jr., 1990. Wildlife, Forests and Forestry, Principles of Managing Forests for Biological Diversity. Pages 80-100.

APPENDIX B

TIMBER HARVESTS¹ AND WILDLIFE HABITAT MANAGEMENT²

Within given areas of state-owned forest lands, vegetative composition goals are determined (consistent with ecological land capabilities and soil and site properties) that provide appropriate vegetative communities, patterns, and age-class structures required by wildlife species. These areas are called wildlife habitat management units or HMU's. Essentially, the greater the variety of vegetative communities, patterns, and size-classes within an HMU the greater will be the potential diversity of wildlife.

Properly planned and executed timber harvests provide an astute way of creating opportunities to accomplish vegetative composition goals within HMU's by taking advantage of natural relationships between vegetation and soil/site properties.

State forest land management strives to attain and maintain vegetative composition goals and patterns consistent with ecological land capabilities and soil and site properties through a process called habitat supply analysis that permits the integration of wildlife habitat concerns into long-term timber harvest and silviculture schedules.

¹ In cooperation with respective State agencies the Department of Resources and Economic Development, Division of Forests and Lands is responsible for forest management, including timber harvests, of all State-owned forest lands through the enabling legislation of RSA 218:5.

² The N.H. Fish and Game Department provides Pittman-Robertson Federal aid in Wildlife Restoration funds from the U.S. Fish and Wildlife Service through a cooperative wildlife management agreement with the Department of Resources and Economic Development, Division of Forests and Lands for the implementation of a "Wildlife Habitat Improvement Program on State Owned Woodlands".

APPENDIX C

CLEARCUTTING ON DRED LANDS

REVISED 3/27/1995

Clearcutting is an important but controversial silvicultural tool. This technique may provide benefits to both wildlife habitat and timber quality. Many of the specific benefits of this tool cannot be replaced by other types of cutting. Often, clearcutting is confused with other cutting methods that may or may not be valid silvicultural practices. Defining clearcutting is difficult because of the variation in the conditions of forest stands. Let's begin with a simple definition;

"Clearcutting is the practice of cutting virtually all merchantable trees for the purpose of making a *complete harvest*, *preparing a stand for regeneration*, or both, *creating an opening larger than two acres*"³.

This definition makes three (3) important statements shown in *italics*. Here we will discuss each statement and its implication toward clearcutting.

Complete Harvest

The most obvious difference between clearcutting and other silvicultural methods is the fact that clearcutting removes all or most of the vegetation (trees) directly during harvesting. But often clearcutting does <u>not</u> remove all the trees. Unmerchantable stems are often left behind because they are too small or they are below the stem quality standards required for sale. Some forms of timber harvesting associated with clearcutting (final cut of the shelterwood method) intensionally leave seedlings and saplings to form the new forest stand. Also, "Reserve Shelterwood" types of cutting leave merchantable stems for other purposes such as wildlife trees and seed trees. Unfortunately, clearcutting is often mistakenly associated with high-grading and unregulated cutting. There is a grey area about which we haven't defined how many trees may be left in a stand considered to have been clearcut. We also need some way of distinguishing between clearcutting and high-grading.

A complete harvest must remove all merchantable stems regardless of their value. Merchantability is based on the local markets. Any stem that may be sold, even stems that return only harvesting costs, must be considered as part of a complete harvest. When merchantable stems are left behind on a site considered clearcut, it must be exclusively for reasons other than economic. Thus seed and wildlife trees may be validly retained on a clearcut. When low quality stems are retained because of poor merchantability, we must question the existence of high-grading.

How many trees may remain in a cutting properly referred to as clearcut? Certainly the number of stems retained must never lead to full stocking of the stand. In fact, to state that the stand was *cut clear*, remaining stems should only have the capability of ever stocking only a small fraction of the stand. Clearcutting as a silvicultural term should be reserved for stands where all stems greater than 1 - 2 inches have been removed. To prevent mis-use of the term clearcut, probably an umbrella term of *final cut* should be used to generally refer to stands where

³ Adapted from "Clearcutting as a Management Practice in Maine Forests" The Irland Group 1988 53pp.

very heavy cutting has taken place for regeneration, since conceivably it is the final cutting in the life of the present stand. Perhaps, no more than 10% of the basal area required for full stocking (B-Line) according to the appropriate stocking guide published by the Forest Service USDA. This is based more on conjecture than science. Table 1 shows the approximate maximum stocking levels for clearcuts for several cover types common to New England.

TABLE 1

MAXIMUM STOCKING OF FINAL CUTS

FOR VARIOUS VEGETATIVE COVER TYPES IN NEW ENGLAND

(Approximately 10% of full stocking)

Cover Type	QMD (INCHES)				
	6	10	14	18	
	trees/acre				
Spruce/Fir	40	22			
No. Hdwd	30	12	8		
White Pine	38	21	12	10	
Red Oak	26	20	8	5	

Final cutting is perhaps the item of most concern to the general public, be it unregulated highgrading, the last phase of the shelterwood system, seed tree cutting, or actual clearcutting.

Prepare a Stand for Regeneration

If clearcutting is to be regarded as a valid silvicultural method, it must scientifically fit into a sequence of treatments designed to obtain a specific goal⁴. Clearcutting naturally fits in at the terminus of the life of one stand and the beginning of another. It therefore must be capable of providing adequate regeneration or preparing a site to regenerate fully on its own. The regeneration obtained must be desirable both in species acquired and growth form provided.

If a forest cutting does not remove enough stems to provide adequate, well distributed regeneration, the cutting would not be referred to as a clearcut. The establishment and release of regeneration must be a planned attribute of the cutting in order for it to be a valid silvicultural tool. This factor also assists us in separating clearcutting from high-grading and "plain old unregulated cutting".

Create an Opening Larger Than Two Acres

The purpose of clearcutting is to regenerate a new even aged stand. This introduces the

⁴ Smith, David M. "The Practice of Silviculture" Wiley Press 7th Edition 1962.

concept of scale. It is generally accepted that openings less than 2 contiguous acres are too small to efficiently map and manage. Openings smaller than 2 acres are primarily managed as part of a larger stand of various ages and size classes. Since clearcuts establish new even age stands, their size must contain enough acreage to map and manage individually. Although we generally recognize 5 acres as the minimum size for a commercial stand, provisions have been made to recognize smaller stands when they occur, including clearcuts larger than 2 acres yet less than 5 acres.

On larger holdings of land <u>not</u> under management by the State of New Hampshire - DRED, it is common to recognize stands of 20 acres or greater, yet make clearings between 2 and 20 acres. It is unclear how these forest openings will be managed since they may be considered too large for selection management and too small to be recognized as stands. They may fill an important role in the gradient of opening sizes biologically. The question is what are they and how are these clearings recognized if they are neither even nor uneven aged stands.

It may also be important to establish that the smallest dimension of a clearcut must be at least twice as wide as the height of the trees surrounding the cutting. Some scientists claim that the effects of clearcutting are not achieved in a forest stand unless this criteria is present. Openings less than two tree heights lack the light regimes and temperatures characteristic of a clearcut. Incidental openings such as truck and skidder roads probably could not be used as clearcuts unless modified.

OTHER FACTORS THAT MUST BE CONSIDERED FOR PROPER CLEARCUTTING

Many other factors must be considered before clearcutting can be used appropriately in forest operations. Many of the considerations required for clearcutting are also appropriate in regards to other cutting methods.

Macro-fauna and Flora

Clearcutting should only be used where it will not negatively impact critical habitat for rare, threatened or endangered species. It should also be used when its impacts can provide needed young age classes, early successional species, certain light and/or temperature regimes and structural diversity of the forested habitats.

Retaining snags, cavity and mast trees is desirable within the clearcut when suggested by the consulting wildlife biologists. When snags, cavities and mast trees are retained, they should not impede the establishment and growth of the regeneration.

Soil & Water Protection

Bormann and Likens⁵ and others have reported extensively on the effects of clearcutting on soil and stream chemistry based on work at Hubbard Brook Experimental Forest and elsewhere. They suggest the following practices;

- 1/ Conduct stem only harvesting whenever possible. Harvesting tops, branches, leaves and twigs removes much of the important organic matter necessary for efficient nutrient cycling.
- 2/ Maintain rotation lengths of at least 80 100 years. This allows biomass and nutrient levels sufficient time to recover adequately from clearcutting.
- 3/ Require harvesting only during dry seasons or frozen ground to minimize impacts to the soil organic layer.
- 4/ Encourage early successional/pioneer species such as pin cherry, aspen and raspberry that rapidly assist in maintaining soil nutrient levels.
- 5/ Follow all BMP's suggested by the Soil Conservation Service USDA for filter strips. Avoid clearcutting on steep slopes, shallow and/or fragile soils.

⁵ Bormann, F.H.; Likens, G.E. "Pattern and Process in a Forested Ecosystem" 1979 New York: Springer Verlag 253 pp.

Visual Quality

Avoid clearcutting in visually sensitive areas. Unique scenery may have a higher value than timber and wildlife goals. Also, unique visual opportunities may be irreplaceable and clearcutting opportunities may be more common.

When clearcutting, avoid straight edges; contour the cut to fit within the landscape.

Occasionally, clearcutting may provide new opportunities for vistas. A narrow uncut zone at the viewer's perspective point may provide trees for framing the vista and buffering some of the impact of the clearcut.

KMD 9/93

DIVISION OF FORESTS AND LANDS

OPERATION NOTICE GUIDELINES (OLD Under Revision)

The <u>Forest Operation Notice</u> provides: (1) notice of Division intent to carry out a project, (2) area description and location map, (3) statement of purpose and justification, (4) outline of proposed actions and desired results, (5) potential project impacts, and (6) special management considerations.

The <u>Forest Operation Notice</u> may be used to meet the requirements of RSA 541-A:22 "Notice to Municipalities", serve as a basis for public comment, and compliment Division forestry education goals. Targeted audiences include local units of government, newspapers, private interest groups, other state and federal agencies, and interested citizens.

The following are minimum considerations:

I. <u>AUTHORITY</u> - Reference is made to one or more of the following:

RSA 212:10 Use of Fish and Game Lands RSA 227-H Forest Management of State Owned Lands and Management, Federal Flood Control Areas

- II. <u>IDENTIFICATION</u> Statement of property and area involved, location, and proposed activity. Access and local features are referenced to an attached location map.
- III. <u>PURPOSE</u> This is a general statement of purpose and listing of reasons for the proposed activities that includes:
 - a. A single statement of general purpose or goal.
 - b. A <u>list</u> of present conditions(s) or opportunities that, if treated, will satisfy the intended purpose or goals.
 - c. A reference to other Division goals the proposal satisfies, such as forestry demonstration, sustained yield of forest products, and public use benefits.
- IV. <u>MANAGEMENT CONSIDERATIONS</u> Bullet statements highlighting management considerations to be addressed likely to impact or be of concern to local units of government, regulatory agencies, special interest groups, user public, abutting landowners, and others.
- V. <u>OPERATIONS SUMMARY</u> Brief statements regarding <u>what</u> treatments are proposed, <u>how</u> and <u>why</u> they will be carried out, what identified <u>impacts</u> they may have, and <u>why</u> specific management considerations (described under Item IV.) will be addressed.

TCM 6/90

Preparing the Forest Operation Notice

Recently the way the Forest Management staff writes Forest Operation Notices has come under review. Many of the notices accompanying our timber sales have appeared to fall into a familiar pattern so that any one notice does not read appreciatively different from another, no matter how dissimilar the operations may be. I believe there are a couple of reasons for this; 1) the format outlined in the timber sale manual is too structured and tends to encourage homogenization at the expense of creativity and 2) the value of the Forest Operation Notice has not been demonstrated to the field staff therefore they are considered useless paperwork and cranked out as quickly and with as little thought as possible. Below I have outlined a few steps that I believe the Concord Office can do to improve the quality of future documents.

- 1. The format of the document should be left to the discretion of the writer. In the past people or groups which received Public Notices on more than one operation probably observed how similar the format made the operations sound and most likely took offense thinking the Division of Forests and Lands was patronizing them. Greater flexibility in the format should spur creativity by the writers and produce documents that appear tailored to each individual operation. If there are some items that must appear in every notice, make a list and distribute it and allow the writers to insert these passages where they see fit.
- 2. The Concord Office needs to inform the field staff of what purpose the Public Notice is intended to serve and how an effective notice can prevent many of the misunderstandings that seem to develop with local government entities, concerned citizens, abutting landowners, politicians, etc. during a timber sale. Tom recently told me how Jack used one of our Public Notices to answer questions to a caller from the media, telling these kinds of anecdotes to whole staff might impress upon them the value of an informative notice.

Below are suggestions to the writers of Public Notices which might help to make the documents more clear and concise;

1. Think about the audience that will be "reading your writing. Public Notices are sent to Selectmen, Conservation Committees, abutting landowners, local politicians, environmental organizations and other concerned citizens. Try to anticipate the different interests and needs of these people and address those interests and needs in your notice. The level of knowledge and interest in natural resource issues varies considerably among the public you are serving so try to avoid scientific terminology and technical jargon if possible but don't talk down to people either or else the more informed ones will lose interest or become suspicious. Below are some good and bad examples of ways to express the same message:

The friendly winds carry the tender pine seed to a gentle landing in the soft earth, if it touches down in rich dark soil then it will be caressed and nutured till it reaches it's full potential as a giant towering forest citizen. however if it lands in harsh grasp of puled needles and leaves then the young seed will die an agonizing death, cold and alone on the dark forest floor.

This method is too cutesy and will make people question our motives and sanity.

BAD

Scarification of the soil using a D-9 with an Altobelli 57 centimeter scarifer will expose sufficient mineral soil which when combined with ambient light levels in the 70 lumens range as is provided by a basal area of 90 square feet per acre will ensure adequate germination of Pinus strobus seed.

This passage relies too much on technical jargon and targets a very limited audience, most people will find it either boring or incomprehensible.

GOOD

Exposing bare soil by clearing areas of leaf and needle debris will help ensure white pine regeneration. Bare soil is cool and moist and provides an excellent medium for white pine seedling growth.

- 2. Leave the dictionaries at home. A dictionary is fine to use to look up spellings or find an occasional synonym but people in the past have seemed to take perverse pride in finding obscure words to get their message across. A good rule of thumb is; if you can't understand it without a dictionary it's likely no one else will either. Below is an actual passage from a Management Plan written by a former Division employee (who will remain nameless) that illustrates this point;
- "Wildlife management, guided by Habitat Management Unit (HMU) goals regulated through silvicultural obligations, is the priority upon the uplands. Site specific applications along with appropriate marsh management, round out the options contributing to the multiple use objective. Improved internal access will result from projected timber operations. Timber management shall reflect evident forest productivity. Complementing ensuing operations is the need for boundary maintenance."

I call this style of writing Staatsism and it should be avoided at all costs. I think everyone can come up with a clearer way of expressing the above passage.

3-Truth and honesty are essential in a Public Notice. Trying to sweeten an operation to the public by promising results that are unlikely or impossible will usually come back to haunt you and will undermine the credibility of the Division in people's minds. Also don't try to make it seem that timber sales will cure everything that is wrong with the world, just describe the likely outcomes and results of the operation. Below are some good and bad examples;

BAD

Removal of 1.2 million board feet of timber off of 50 acres of the Blackwater Flood Control Area will enhance the scenic beauty of the stand by opening star gazing portals in the forest canopy as well as extended obstacle-free shooting corridors for hunters. Any monetary benefit of the sale is strictly circumstantial.

<u>GOOD</u>

Harvest of 1.2 million board feet of timber off of 50 acres of the Blackwater Flood Control Area will begin the process of regenerating a new stand of white pine while producing revenue that will be used for continued management of the Flood Control Areas.

- 4. Offense is more effective than defense. take the attitute when writing the Public notice that you are informing people, not defending your every action. You are the expert on that particular stand, let your knowledge shine through in the Public Notice.
- 5. The Public Notice is one of our best ways to emphasize that we are a government agency that accomplishes something. Use the forum of the Public Notice to publicize not just the particular operation but other activities the Division has done that we are proud of. Since we are dependant in a large degree on General Fund monies it is important to have as many voters as possible with a good opinion of our agency and it's mission.

<u>GOOD</u>

Creation of areas of regenerating trees will benefit woodcock and grouse by providing them with areas to feed and raise their young.

BETTER

Creation of areas of regenerating trees is part of the larger picture of State management of the wildlife habitat on the Flood Control Reservoirs. The HopkintonEverett Reservoir is fortunate in having considerable acerage in recently (< 30 years) abandoned agricultural land which is a habitat type relatively uncommon in this area of the state. Using timber sales, prescribed fire, brush-hogging, appletree release, seeding & fertilizing and other management techniques we keep these areas in a grassy or brushy state and also improve the surrounding mature woodlands to create a diversity of habitat types that will benefit many species of both game and non-game wildlife.

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GUIDELINES FOR FOREST MANAGEMENT ACTIVITIES IN RECREATION ZONES AND STATE PARKS

- 1. The primary objective of resource management in areas designated recreation in management zoning, or in areas of high recreation use, will have as its primary objective the creation and maintenance of environs conducive to, and consistent with the mission to provide high quality recreation experiences.
- 2. Resource management in State Parks will strive to be a model of public stewardship of the environment.
- 3. Resource management activities in State Parks should be interpreted to the public. Interpretation includes, but is not limited to, signing, guided walks and brochures.
- 4. Recreational objectives will be integrated and prioritized in resource management planning.
- 5. Special conditions on resource management activities will be considered on a case by case basis.

IT'S FOR THE BIRDS

This portion of Kingston State Park is a "patch" which was cut during the winter of 1994. Large unhealthy White Pine were cut, leaving this opening to regenerate with trees which will make up the forest of tomorrow.

As it grows a large number of wildlife may use it. At least twenty species of songbirds in NH are tied in to this "brushy" stage, including the Rufous-sided Towhee, Cedar Waxwing and Common Yellow throat. Many of these species are fruit eaters such as the Cedar Waxwing and Mockingbird.

This area provides excellent food and cover for many species. Fruit producing shrubs abound in this patch. They include: Bittersweet, Barberry and Raspberry (among others). Can you find them?

For more information contact the Division of Forests & Lands at 271-3629.

WHAT HAPPENED HERE?

A decade ago a timber harvest took place here at Bear Brook State Park. White pine growing in this area was unhealthy and dying, so the project's purpose was to: 1.) salvage dying trees, and 2.) to help establish the new trees which would become tomorrow's forest. That project accomplished its goals; resulting in an abundance of quality hardwood regeneration. The current "overstory removal", completed in 1996, "releases" these young trees from the older, competing trees, allowing them to grow unhindered. Though most of these small trees were cut, or knocked over during the project, their root system stayed in place & they will re-sprout, and grow even faster than before. This project is in part of the Park where management actions like this, which favor sunlight loving tree species and the wildlife that use them are done in an ongoing effort to increase diversity in the Park. Don't be surprised if you see signs of deer and moose feeding in this area, or see a hawk perched in one of the remaining snags (dead trees), or hear a variety of songbirds in this area of "little trees" in the spring.

For more information contact the Division of Forests & Lands at 464-3453, or PO Box 1175, Hillsboro NH 03244.

THE VISTA CUTS

November 1996 ~ The forest management which takes place in this part of Bear Brook State Park is called "uneven-aged". With this type of management there will always be a variety of trees, from young to old, in a timber stand. As part of the timber harvest recently completed a number of "patches" were cut, where new trees or "seedlings" will develop. These openings can be up to 2 acres in size, though most are much smaller. As part of the planning for this project the Division of Parks & Recreation asked that some of the patch cuts be located adjacent to Podunk Road, to open up views or "vistas" to the southeast. These vistas are especially helpful for park users who are unable to get out on the trails where other views are available. These cuts may look barren now, but they will quickly regenerate, and attract a variety if wildlife species. Some, like deer & moose, will come to feed on the new, young trees, while others, including many songbirds will come to nest.

For more information contact the Division of Forests & Lands at 464-3453 or PO Box 1175, Hillsboro NH 03244.

WHAT HAPPENED HERE?

December 1996 ~ A commercial timber sale recently took place off the "Little Bear" and "Bear Brook" Trails. This cutting operation was designed to "release" certain pockets of White Pine seedlings and saplings. These small trees seeded in as a result of a hvest conducted in 1986 which allowed light to reach the forest floor. Once established these small trees needed more room to grow. This was achieved by removing the larger trees which "overtopped" the regeneration, thus giving it more light, space, and nutrients. In this part of the park the largest "patch cut" that can be made is 2 acres. This project included eight patch cuts, all under 2 acres. The only cutting between patches was for the skid trails, where the trees were pulled out of the woods. White pine is an important tree species in the state, and the number of young white pine stands is in decline. Projects like this help insure that there will always be big and small white pine providing wildlife habitat, forest products, and wonderful places to recreate.

Note: An early, heavy, wet snowstorm on 12/7/96 knocked over or buried much of the released pine regeneration. Most of these small trees should recover, but only time will tell.

For more information contact the Division of Forests & Lands at 271-3629 or PO Box 1856, Concord NH 03302-1856.

Interpretive signs 76

WHAT HAPPENED HERE?

November 1996 ~ A commercial timber sale recently took place off the Campground Road and "Pitch Pine" Trail. This cutting operation was designed to "release" certain pockets of White Pine, Hemlock and Hardwood seedlings and saplings. Some of these small trees seeded in where light could reach the forest floor, some like hemlock could establish in shade. But once established these small trees needed more room to grow. This was achieved by removing the larger trees which "overtopped" the regeneration, thus giving it more light, space, and nutrients. In this part of the park the largest "patch cut" that can be made is 2 acres. This project included a number of cuts, all under 2 acres. White pine, Red oak and Hemlock are all important tree species, both for forest products and wildlife habitat. The number of young white pine and red oak stands in the state are in decline. Projects like this help insure that these species will always be around.

For more information contact the Division of Forests & Lands at 464-3453 or PO Box 1175, Hillsboro, NH 03244.

GUIDELINES FOR MANAGEMENT ACTIVITIES IN RIPARIAN ZONES

Riparian Zone - For the purpose of management operations on all lands under the jurisdiction of D.R.E.D., riparian zones will encompass all lakes, ponds and streams that flow throughout the year and the land managed exclusively for their protection. Ephemeral streams will be managed on a case by case basis.

Filter Strips- Filter strips are the area of land lying along the riparian resource that will be managed exclusively for their protection. Filter strips are the area surrounding the shoreline of a pond or lake -OR- the area lying on each side of a stream. The strip begins at the normal edge of the water body. Filter strips widths will be designated in accordance with the "Best Management Practices" prescribed by the Soil Conservation Service USDA with the following exceptions:

- 1. No management activities will occur in the filter strips without prior coordination with the State Land Management Team.
- 2. No slash or logging debris will be left in the riparian zone.
- 3. Existing management activities will be exempt from the restrictions until such time as any modification is necessary.
- 4. All RSA's and provisions in the TIMBER SALE CONTRACT AND AGREEMENT will be strictly enforced.
- 5. When stream crossings are required for management of lands outside the riparian zone, crossings will be limited to the minimum needed, and will be in compliance with the RSA's and BMP's.

Filter Strip Width

Filter strip widths will correspond to the following slope designations to be determined by average slope in the area to be effected and measured in a horizontal plane;

Average Sideslope	Filter Strip Width
0 - 10%	50 feet
11 - 20%	70 feet
21 - 30%	90 feet
31 - 40%	110 feet
41 - 50 %	130 feet
51 - 60%	150 feet

CHECKLIST FOR LOG LANDING LAYOUT:

Issues affecting Location & Size: Questions: Τ

 Location & Size.	Questions.
Function	Can a viable log landing be located to service the project area?
Erosion	Can the landing be located to avoid and /or mitigate the possibility of erosion?
	How does erosion potential relate to skid trail location and treatment?
	Are there water quality and/or wetland issues?
Cost	Do factors make it necessary to spend \$'s to put in a landing, and are there other options?
Priorities	What is the property type? Park, Forest or WMA?
	What is the primary purpose of the project? And how will this affect location, size, post sale treatment and/or uses?
Post sale uses	When the sale is complete can the landing fill a need for: * Wildlife Openings? * Parking? * Scenic Vistas? * Interpretive opportunities?
Natural Heritage Inventory Elements	Will landing size and location have an impact-negative or positive-on any Natural Heritage Inventory elements?
The Human Element	Just how visually sensitive is the area?
	Will an opening improve visual diversity?
	Is the area close to a heavily used recreation area?
	Are there aesthetic or habitat considerations which indicate the need to "buffer" the landing from high use areas?
	Is there a potential for creating an attractive nuisance?

Issues affecting T post sale uses:

Questions:

*	
Wildlife Habitat	How much open habitat is already available on the property or the surrounding area? What type of wildlife are you managing for, those tied in to early, mid or late successional habitats? Is there a need for additional wildlife openings?
Parking	Is there a need for parking at this location? Is the location accessible? Is the soil/site compatible with this use? Are there erosion, drainage or water quality issues associated with this use? Are there potential hazard trees in the area? Who is responsible for maintenance? What is the "trash and party" potential?
Scenic Vistas	Can a landing be suitably located to have this post sale function? Will this necessitate an additional cost to the project?

Issues Affecting post sale

T treatment: Questions:

Cost	Is the post sale treatment necessary/what is gained?		
Erosion	Does the area require post sale stabilization?		
	Is planting necessary to prevent erosion?		
	Will planting require the use of lime and/or fertilizer, and are there water quality and/or wetland issues related to this?		
	Does the area only need something like winter rye to hold the site until naturally occurring plants take over?		
Wildlife Habitat	Are you managing for wildlife species which need a source of early spring foods? And if so, do you need to plant (clover for instance) or are there native species (like false lily-of-the-valley) which are going to move in and provide the same benefit?		
	Are you managing for species which need grassy or brushy habitat components? How will this affect how you want to influence post sale succession?		
	Are you managing for species which need open "dirt" areas for dusting or egg laying?		
	What level of maintenance is necessary to maintain the area's usefulness? Will it be reused in ten to twenty years? If so, is there a need to spend money to set back succession in the interval?		
	What is the preference for handling logging debris? Will piling debris provide escape cover, which will increase the area's usefulness to wildlife?		
	Is there a need to compliment the opening by planting fruiting trees and shrubs?		
Aesthetics	Is visual quality so overriding a factor that seeding is a necessity, such as within a developed recreation area?		
	What is the potential for interpretive signage?		
Secondary Uses	Parking and/or Vistas: * Is the soil/site compatible with the intended use? * How does a secondary use affect other post sale treatments/issues?		

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: November 14, 1994

FROM: Kyle D: Lombard AT OFFICE: North Region

Forest Technician II

SUBJECT: Best practices for post logging treatment of log landings.

TO: Thomas Miner, Administrator, Forest Management Bureau

This past summer we have spent some time investigating possible treatments that could be applied to log landings that would have wildlife, ecological and societal benefits. The driving force behind this effort was a project at Devils Slide State Forest, where we wanted to do something to an old log landing which would benefit deer and upland bird habitat while stabilizing the soil and providing the public with a healthy, clean looking state forest.

We looked at some of the old state jobs, some large timber industry jobs and some private consulting jobs to see what the standards are for other groups within the forest industry. There is also some fresh research on the subject put out by the Forest Service. Each group has quite different practices with regard to log yard management, but that makes sense since each has different constituencies and different goals for lands under their management.

The private consultant I spoke with turns his landings into backyard turf lawns with all residues like wood chips and buttons out of sight. The Forest Service does a little less work to their landings but still plant grass some times and other times do nothing but gate the entrance. Large industry landings were the least managed. Wood chips were almost always covering the site, slash was always visible and planting was a rarity. The State landings fell somewhere within those extremes. Landings at the Hayes Marsh sale (P 1-294) and the X-Country Skiing Parking Lot sale at Bear Brook, as well as those at the Red Pine sale at the Blackwater Flood Control Area, and (P 1-313) at Shaker State Forest, were not seeded but within a few years they were colonized with grasses, rubus, sweet fern and goldenrod. They look good because the landings were cleaned of residues and the areas were flat so they were good spots to let nature revegetate the landing. (All four were directly off heavily uses roads or recreation trails.) Other landings at the Franklin Falls Flood Control Area, Leonard WMA, and Cardigan Mountain State Forest, were planted with a variety of seed mixes and they look great. These sites were prime candidates for seeding because of the locality and specific wildlife interests.

When you consider what treatments should be done to a log landing the items to address are sanitation and soil stability, wildlife habitat, aesthetics, alternative uses, practicality and cost. The first of those, can be addressed early in the planning stage and hopefully taken care of by putting the landing in a stable spot. Of all the landings on state property I didn't see any erosion of the landing beds themselves. This suggests good planning in putting the loading zone on flat, dry soils with good access. The most erosion of landings occurred on large timber industry lands. Their tracts to be cut were larger and

steeper than most of the state lots and the cut slope of the landings tended to wash out. To counter the problem the paper companies have been cutting the upslope steeper and leaving the root and grass mats hanging over the exposed soil. This has helped stop large rain events from washing exposed slopes down the road. One other logging technique Champion has become aware of is a suggestion by the Vermont BMP's and it consists of putting a "J" in the skid trail just before the landing when approaching the landing from the uphill side. The skid trail comes down the slope and just before the landing it turns-back up hill for a short distance then out onto the landing. From an aerial view this creates a J shape in the trail. The purpose being to shed any water traveling in the skid trail before it reaches the landing. This will reduce the mud on the landings and perhaps let them operate through some of the moderate rain events that used to shut them down.

When considering wildlife habitat improvement plans on a current log landing you first have to answer the question of whether it is best to actively manage the revegetation of that opening or leave the landing to natural processes after the harvest. Literature I read from state wildlife agencies including Connecticut, New Hampshire, and Pennsylvania, suggest planting grasses and legumes to maximize habitat for deer, grouse, song birds and many other wildlife species. Recently, on the White Mountain National Forest, the Forest Service has revisited its thinking on this issue. John Lanier has suggested it's at least as good to leave the landing to natural processes of succession since here in the northeast a clearing revegetates within a few years of disturbance. This natural process may be of more use to such wildlife as grouse looking for a place to dust themselves or the turtle looking for a place to lay eggs, than a planted landing. Lanier suggests that without repeated management such as mowing or fertilizing the planted grasses fall out of the sight rather quickly and the natural process has only been delayed. USFS research suggests visitation rates of large mammals did not differ based on landing size but does increase based on age of landing. This was due to the soft mast production of medium aged landings. If you were to plant landings to grass the berry stage is delayed thus delaying increased visitation by many mammals both large and small. The same study which was done by James Tucker for his masters degree, suggests .5 acre landings seem to support the most wildlife per unit area. His research suggests "Few correlations were found between measures of wildlife abundance and vegetation composition; however, direct observations suggest fruit production is a valuable contribution of log landings. Native vegetation should be encouraged over planted grasses.".

The reverse of this argument is that one dwindling habitat in the northeast is grassy fields and openings. An Extension service newsletters suggests that as much as five percent of your total forested areas should be in grassy openings. Log landing are an ideal spot to try to meet that goal. Periodic maintenance would be requireded, and a decision on what species of grasses and legumes along with fruiting shrubs to plant in the landing area would be needed. Books have been written about types of seed and there amounts per acre to apply to log landings. The most

popular recommendations for grass are Redtop for its quick establishment, Birdsfoot Trefoil for its winter hardiness and tolerance of all types of soil, and creeping fescue for its shade tolerance and how well it spreads over a site. Deer lovers and biologists want to put Red and White clover into that mix. Research done in Pennsylvania has shown that clover is gone from the site in as ,~few as three to five years after planting if there is no reapplication of lime and fertilizer.

When considering fruiting plants which benefit wildlife, we should try and plant the native species such as serviceberry, dogwoods, winterberry, juniper, elderberry, blueberry, and grapes. Other good nonnative wildlife species are apple trees, hawthorn, multiflora rose, and barberry.

There are two different schools of thought being successfully implemented in the planting of grasses on log landings. The first is to spread very light amounts of lime and fertilizer (10001b./ac.) and dump the seed on at 50 to 100 pounds per ac. The other method is to go heavy on the lime (40001b./ac.) and light on the seed (121b./ac.). Private consultants tend to use the first probably because seed is so much easier and quicker to apply than lime and fertilizer. Hiowever, it should be mentioned that they get cost sharing money to plant log landings. This may shed some light on why they believe so strongly in turning landings into astroturf. The Extension office recommends the second method, and that has been what Forests and Lands has been following with good results. At Devils Slide I tried both methods and also seeded over natural ground with no lime. After almost Two months the grass heights of all the test areas are equal but its easy to see why the more seed theory is liked, that area is much denser and from a distance looks greener. The limed areas may take off better next spring but in the short run the only factor that seems to have an effect on seed catch and looks is amount of seed applied. Its easy to see why consultants use the first method. They get fast dense cover that the land owner loves to see, plus the seed is lots easier to spread than lime. A consultant I talked to said that they continue to grow well after the first year and the method has worked great. The cost of the two methods is about the same because lime is much cheaper than seed.

My impression is that if you pick the right kind of grass for the soil and site you want to plant you don't need to worry about enriching the site with limes and fertilizers. Liming and fertilizing is labor intensive, and you have to reapply the nutrients or you will lose the grass in a short period of time. There are seeds out therefor every soil condition. For example if you have poorly drained soil you would plant Reed Canary grass, on well drained soils use Crown vetch and Tall Fescue, for acidic soils Switch grass and Deer tongue is great, for basic soils Redtop and Birdsfoot Trefoil work well.

In conclusion its hard to write guidelines to manage log yards because each site has different soil, different slopes, different levels of recreational use, and different wildlife concerns. My general log landing management would be to clear the surface of all wood chips, pile the buttons and slash along forested edges, plan a short lived grass like winter rye, and plant as many fruiting shrubs as the state nursery can provide. This scheme would address all concerns. The winter rye would help eliminate first year erosion and aesthetics. The fruiting shrubs and brush piles help wildlife and we have not delayed the natural revegetation process very long because we haven't laid down an expensive and labor intensive mat of grasses that will last five or ten years. This scheme would be deviated from whenever a specific goal for the landing is present.

For example, if the landing is going to be used for a parking lot you would want to bury the buttons, and plant tall fescue because of its ability to resist heavy traffic. Another example would be were specific wildlife habitat is a priority, say an area used to be heavy agriculture land but has been drifting back to forest land, and the landing is part of an old five ache field. In this case perhaps seeding with Timothy would be good and try getting the local farmer to hay it commercially. Another example might be were money is tight and some erosion control is

needed. Perhaps planting only the fill side of the landing would control sediment and the rest of the landing would still be able to be left in its natural state. Every site requires a set of goals and the management of the landing will meet the goals.
cc: Forests and Lands and Fish and Game Staff



State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3644 FAX (603) 271-2181



RECEIVED

OCT 1 4 1997

D.R.E.D.

October 15, 1997

Brent Edmonds, P.E.
Department of Resources
and Economic Development
PO Box 1856
172 Pembroke Road
Concord, New Hampshire 03302-1856

SUBJECT: GUIDANCE DOCUMENTS FOR TIMBER HARVESTING OPERATIONS

Dear Mr. Edmonds:

Enclosed you will find two draft guidance documents which we have developed for timber harvesting operations. I'm forwarding these proposed bulletins to you for your review and comment. Any suggestions you may have will be greatly appreciated. Hopefully, together we can develop sources of information for loggers that will be both useful and user friendly.

Once you have had a chance to review the enclosed information, you may forward any suggested changes to Rick Berry or me. Please contact me at 271-1165, or Rick Berry at 271-3440, if you have any questions.

Sincerely,

Lynn A. Woodard, P.E., Supervisor

um a. Wardens

Oil Compliance and Initial Response Section

Recommended Oil Spill Response Equipment

For Timber Harvesting Sites

In order to have a rapid, effective response to an oil spill, it essential that personnel be properly trained and have equipment readily available. The specific type and amount of equipment needed will be site specific; for example, floating containment boom would not be required at a site where there is no surface water. When assembling a compliment of response equipment appropriate for a particular job site, the following should be considered:

- 1. Is surface water adjacent to, or immediately downgradient from the site, that could potentially be impacted? If so, is the water flowing or static?
 - 2. How much product will be stored/used on site (including fluids in the equipment)
 - 3. What types of petroleum products are being used on site?
 - 4. What type of soil is present at the site, and what is the slope of the land?

Although the amount and types of equipment will vary, there are some common types of response equipment that can be utilized for the majority of oil spills. Following is a suggested list of equipment type and quantity that should be stockpiled on site, and used to contain, confine, and remove oil:

Sorbent pads 2 bales 1 bale (4 ten foot lengths) Sorbent boom Containment boom (if near surface water) 50 foot length Shovels 2 Grade stakes 12 6 ml poly sheeting 1 roll, 100 feet in length Hand-held sledgehammer 55 gallon drum (or equivalent trash cans) 1 (withcover) Heavy-duty trash bags 1 box **Duct Tape** 1 roll Rubber or Nitrile Gloves 2 pair Speedy Dry (or equivalent) 2-50 lb. Bags Rubber or latex overboots 2 pair Plugging and patching devices various Funnels, drip pans various Polyethelene rope 100 feet

WHAT TO DO IF A SPILL OCCURS

- Assess the situation. If you don't feel you can safely take any action, stay at a safe distance.
- Make the appropriate notification.
- If feasible stop the discharge: close valves, plug holes in containers, stop the delivery, etc.
- Confine the spill, to the best of your ability. Place a container under the source, if possible, or use an absorbent material (sawdust, woodchips, kittylitter, sand, etc.) To dike and absorb the spill.
- Remove all discharged oil and oil contaminated debris. This may require the services of a professional cleanup contractor.
- Ensure that all oil contaminated materials are stockpiled on, and covered with, an impermeable material (e.g. poly sheeting); or placed in a closed container.
- Arrange for proper disposal of all spill debris.

HOW TO PREVENT OIL SPILLS

 Keep all petroleum products (used and unused) properly stored in closed containers.

- Containers should be in good condition and placed such that they are stable.
- Do not store petroleum products within 50 feet of any surface water.
- Take precautions to prevent vandalism: control site access, lock pumps, etc.
- Prevent overfills: know container capacities, don't leave pumps unattended, and use funnels and drip pans, when appropriate.
- Employ preventive maintenance practices: change worn and damaged product lines and hoses, before they break.
- Ensure that all employees are properly trained.

WHERE CAN I GET ADDITIONAL INFORMATION?

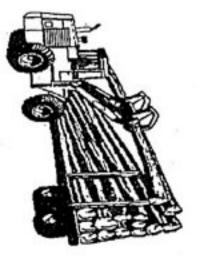
Contact Rick Berry or Lynn Woodard at: Department of Environmental Services 6 Hazen Drive Concord, New Hampshire 03301 (603)-271-3644



Prevention and Response for Timber Harvesting Oil Spills

Each year in New Hampshire oil spills occurs at timber harvesting sites. While some of the spills are relatively minor in nature and can be easily cleaned up, others cause significant environmental damage and cost thousands of dollars to cleanup. Proper planning and good management practices will prevent spills. If a spill does occur, proper notification and a rapid response can limit cleanup time and costs.

This pamphlet contains information to help you understand the basic notification and response requirements. Additionally, guidance is provided here in to assist with the development and implementation of spill prevention procedures.



WHO SHOULD REPORT AN OIL SPILL?

discharge of oil shall report such discharge immediately. party or other person having knowledge of a RSA 146-A:5 requires that any responsible

WHEN DOES AN OIL SPILL HAVE TO BE REPORTED?

conditions: NHDES unless it meets all of the following Any discharge of oil must be reported to the

- The discharge is immediately The discharge is less than 25 gallons;
- n contained; completely removed within 24 hours; The discharge and/or contamination is
- D. There is no impact or potential impact to groundwater or surface water

by your insurance company or a concerned be questioned during the sale of the property information will be on file should you ever no penalty for reporting a spill and the If you are in doubt, report the spill. There is

SPILLS INTO THE SURFACE WATER?

reported, regardless of amount. In addition Response Center at 1-800-424-8802. NHDES you must also contact the Nationa to notifying the local fire department and Oil spills that impact surface water must be

HOW DO I REPORT A SPILL?

a spill is discovered. an oil spill and should be notified as soon as department is usually the first responder to NHDES at 1-603-271-3644. The local fire section (IRS) can be reached by calling the Monday-Friday) the Initial Response Subnormal working hours (8:00 am to 4:00 pm, 800-346-4009 or 1-603-271-3636. During New Hampshire State Police Dispatch at 1-Spills can be reported anytime by calling

WHAT INFORMATION IS REPORTING A SPILL? REQUIRED WHEN

information; be asked to supply the following during the initial report. Generally you will receive as much information as possible response to the spill it is imperative that we In order for IRS to determine the proper

- The caller's name and phone number;
- of the responsible party, if known; The name, address and phone number
- Ö spill was observed; Date and time of the spill or when the Location of the spill site;
- Cause of spill, if known;
- Type of oil spilled;
- 9 Amount spilled, if known Who has been notified, local fire
- departments, insurance companies, What steps have been taken to contain initial response contractors, etc.; and

WHAT HAPPENS NEXT?

process. responsible partly through the cleanup will evaluate the situation and guide the are set forth in Env-Ws 412. IRS staff The requirements for initial response,

THE COSTS OF OIL SPILLS

environmentally damaging event.

can limit cleanup time and costs and

Proper notification and a rapid response

keep a minor spill from becoming an

there can be serious financial impact. Aside from the environmental impact



anyone who willfully or negligently and state penalties can be levied against extremely high. Additionally, federal Spill cleanup and disposal costs can be discharges oil into the environment; fines can be as much as \$10,000.00 per

COOPERATIVE MANAGEMENT AND RESOURCE INTEGRATION

COOPERATIVE LAND MANAGEMENT COMMITTEE

The purpose of the cooperative land management program (CLMP) is to provide coordinated land use policies and management of the State's natural resources agencies. The basic objective of the program is to identify, apply and, evaluate land use policies and management practices which offer the best opportunity for combining resource conservation or improvement for public use and benefit.

As presently constituted, the CLMP embraces the following agencies:

Fish and Game Forests and Lands Parks and Recreation Water Resources

Under current State government organization, there is no single natural resources agency. The Division of Forests and Lands and the Division of Parks and Recreation are units of the Department of Resources and Economic Development whose Commissioner is appointed by Governor and Council. The Fish and Game Department is a separate agency whose Director is appointed by, and serves under the direction of, a 10-member Fish and Game Commission. The Water Resources Division is a unit of the Department of Environmental Services.

An executive committee, composed of the four Directors of the member agencies and, a working committee appointed by the Directors made up of key resource managers in each agency, constitute program members. To effectively administer the CLMP, member committees are instructed to: (1) provide timely review of adherence to current policies and objectives, (2) formulate specific recommendations regarding the nature, extent and, timing of land use practices on specific sites, (3) initiate management practices which the executive committee has approved and, (4) evaluate the execution and results of such practices.

The working committee of the CLMP meets regularly and reports to the executive committee on such program activities as: maintaining an inventory of each agencies properties, review and coordination of land acquisition and disposal, multi-disciplinary review of properties and ongoing programs, coordinated agency funding and utilization of agency personnel, development and implementation of interagency programs and, improvement of ongoing programs and multi-disciplinary management activities.

STATE LAND MANAGEMENT TEAM

The purpose of the multi-agency state land management team (SLMT) is to provide coordinated, inter-disciplinary resource planning and management assistance at the project level on state-owned forest lands, consistent with the mission and policies of participating agencies.

The inter-disciplinary approach is designed to ensure long range, comprehensive and balanced consideration of multiple uses and resource values on public lands since no single scientific discipline is sufficient to adequately identify opportunities and resolve issues and problems.

Core members of the SLMT consist of professional and technical resource management specialists from the following agencies (additional agencies participate on an as needed basis):

Fish and Game Department
Division of Forests and Lands
Division of Parks and Recreation
Natural Heritage Inventory
Trails Bureau
Office of Historic Preservation

The members of the SLMT meet regularly to: (1) review proposed land management activities and provide input in the development of operation plans, (2) provide inter-disciplinary assistance to agencies in the development of long-range comprehensive property/area management plans and, (3) provide inter-agency communication on the status of land and resource management projects, (4) coordinate field inspections of project proposals and, if necessary, (5) operation plans or SLMT considerations are presented to the Cooperative Land Management Committee.

PETITIONS/REQUESTS/CONTESTED CASES/APPEALS

(for discussion purposes only)

The following information is for discussion and reference purposes only. For complete reading of the law, please refer to appropriate RSA's covering appeals, contested cases, claims against the state, etc.

RSA 541-A:14 Agency Action on Applications, Petitions and Requests.

This RSA lays out the specific actions and time frame within which an agency must respond to an applicant, petitioner or requester in any matter other than rulemaking or declaratory ruling.

Each agency shall:

- .I **Within 60 days of receipt**, examine the application, petition or request, notify the applicant of any apparent errors or omissions, request additional information permitted by law to require, and notify the applicant of the name, title, address and phone number of an agency official or employee who may be contacted regarding the application.
- II. **Within a reasonable time, not to exceed 120 days, after receipt** of the application, petition or request, or of the response to a timely request made by the agency pursuant to paragraph I., the agency shall:
 - (a) Approve or deny the application, in whole or in part, on the basis of nonadjudicative process, if disposition of the application by the use of these processes is not precluded by law; or
 - (b) Commence an adjudicative proceeding in accordance with RSA 541-A:16 (see below)
- III. If the time limits prescribed above conflict with time frames provided for by another law, the time frames of the other law shall control.

RSA 541-A:16 Availability of Adjudicative Proceeding; Contested Cases; Notice, Hearing and Record.

This RSA requires or authorizes an agency to commence adjudicative proceedings, at any time with respect to matters within its jurisdiction, if a matter reaches the stage at which it is

¹ adjudicative process is a formal (judicial) process that results in a settlement that may not be binding until confirmed by a higher court or assented to by the parties

APPENDIX E continued

considered a contested case or, if the matter is one for which a provision of law (or rule) requires a hearing (e.g. action taken by agency is contested or appealed as unreasonable or unlawful).

The following is based on the above RSA and are presently being drafted within DRED rules:

- 1. File a motion (letter requesting a hearing) with Commissioner
- 2. Commissioner schedules 1 or more informal (prehearing conferences) meetings in order to reach settlement prior to initiating formal adjudicatory proceedings.
- 3. If settlement is reached, Commissioner prepares formal document specifying terms of settlement, all parties sign document.
- 4. If no settlement is reached through informal conferences, Commissioner initiates formal adjudicatory proceedings
- 5. Formal adjudicatory proceedings (see attached RSA)
- 6. Petition for appeal against order of commissioner resulting from #5 showing that the same is clearly unreasonable or unlawful.

Short of a court injunction, or other limitation imposed by law, it is my opinion that stopping a timber sale on DRED lands, in the event of an appeal or request for formal adjudicatory proceedings, would be at the discretion of the commissioner, pending outcome.

STATE OF NEW HAMPSHIRE DEPARTMENT OF RESOURCES AND ECONOMIC DEVELOPMENT DIVISION OF FORESTS AND LANDS CONCORD, NEW HAMPSHIRE

DATE: June 16, 1998 TRACT: Bear Brook State Park PROJECT NUMBER: P1-397

TIMBER SALE PROSPECTUS

Marked stumpage in the town of Allenstown, New Hampshire Authority: RSA 227-G:3 and 227-H:2

(1) INTRODUCTION:

This Prospectus provides detailed conditions of this timber sale to enable prospective bidders to determine their interest in purchasing the subject stumpage. Bidders are expected to examine the property and determine volumes, values, and operating conditions for themselves.

(2) CONTRACT SPECIFICATIONS:

A. The Purchaser shall be granted permission to enter the premises for the purpose of cutting and removing marked trees, subject to the following restrictions and limitations, which will be included in the Timber Sale Contract and Agreement.

(3) CONTRACT

A. The Purchaser shall be required to execute a contract covering the specifications in this proposal within 30 days after the opening of bids.

(4) PERIOD OF CONTRACT

A. The Purchaser shall be allowed from August 15, 1998 to March 27, 1999 in which to enter, cut, and remove said timber, unless such time is reduced for breach of contract conditions.

B. The Agent of the State reserves the right to interrupt (stop) any phase of the operation if, in the Agent's judgement, critically damaging water, mud, snow or erosion conditions dictate such action. Should this occur, the Agent, at his discretion, may extend the contract period to the extent necessary to compensate for the shutdown.

C. Should the Purchaser remove all subject trees prior to the termination date of the contract, all purchaser's rights granted under the Timber Sale Contract and Agreement to enter upon said premises shall terminate, and upon termination of the contract by limitation or otherwise, shall quit the premises in a peaceable manner and remove all equipment.

(5) <u>METHOD OF PAYMENT</u>

A. Payment for stumpage shall be required in advance of cutting on the basis of bid price per unit of product.

B. The first of five (5), approximately equal, payments shall be due upon signing of the Timber Sale Contract and Agreement which must be within thirty (30) days of the bid opening. Subsequent payments shall be due when the value of the stumpage cut and shipped to the mill equals three-quarters (3/4) of each advance payment. If timber is stored between cutting and shipment, the Agent of the State will determine when its value equals three quarters of each payment made. Final settlement shall be determined from mill delivery scale and any advance payment not compensated by stumpage will be returned to the Purchaser. Any balance due the State from a volume overrun must be paid before the performance bond is returned.

C. Estimated volume by species is as follows:

Species/Product	Volume Totals
White Pine Sawlogs	433,000 Bd.Ft.
White Oak Sawlogs	8,700
Red Oak Sawlogs	5,900
Red Maple Sawlogs	2,900
Misc. Hardwood Sawlogs	200
Hardwood Chipwood	988 TONS
Softwood Chipwood	430

D. Advance stumpage payments shall be made payable to "TREASURER, STATE OF NEW HAMPSHIRE" and mailed to Raymond M. Boivin, Division of Forests and Lands, PO Box 1856, Concord, New Hampshire 03302-1856.

(6) GENERAL TERMS

A. The full and proper performance of each undertaking of the Purchaser hereunder and the full compliance with each requirement imposed on it hereby shall be deemed a condition of the

contract.

- B. The State hereby licenses the Purchaser by its agents and employees to enter upon the tract hereinbefore described for the purpose of cutting and removing therefrom the timber which is the subject of agreement. Provided, however, that the State reserves the right to designate and prescribe the location and general specifications of all roads and/or skidder trails and log yards which the Purchaser may wish to construct or use in connection with this agreement and provided further that this license is granted upon the express condition that the Purchaser perform each and all of its obligations hereunder, and said license may be terminated and rendered null and void at any time without notice if, in the opinion of the Agent of the State, the Purchaser has failed to perform any of its obligations, said termination to be without liability on the part of the State.
- C. The Purchaser agrees to observe all restrictions and provisions of this contract and conform to the directions and instructions given by the Agent of the State. In case of disagreement relative to the cutting, skidding and shipping of the timber under the terms of this contract and agreement, the decision of the Director, Division of Forests and Lands shall be final. The State reserves the right to stop the timber sale operation if the conditions of this contract are not being observed.
- D. This contract may not be assigned, transferred, sold or made over to another party without prior written permission from the Director, Division of Forests and Lands. The parties hereto do not intend to benefit any third parties and this agreement shall not be construed to confer any such benefit.
- E. This agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto.
- F. This agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings relating hereto.
- G. No failure of the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event, or any subsequent Event. No express waiver of any Event of Default shall be deemed a waiver of provision hereof. No such failure or waiver shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other default on the part of the Purchaser.
- H. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in the United State Post Office addressed to the parties at the addresses first above given.

(7) SCALING

- A. The International 1/4 Inch Kerf Log Rule shall be the basis of measure for sawlogs. The standard 128 cubic foot cord or its weight equivalent shall be the basis of measure for cordwood. The weight equivalent for the purpose of this agreement shall be 5,200 pounds for hardwood and 4,300 pounds for softwood. The standard 2,000 pound English ton shall be the basis of measure for chipwood.
- B. Purchaser's scale shall be accepted subject to check scales by the Agent of the State. The Purchaser agrees to permit the Agent of the State to review the scaling and scale recording process from time to time as the Agent of the State desires and to perform such checks and audits thereof commensurate with recognized and established procedures.
- C. In case of disagreement as to scale, the decision of the Director, Division of Forests and Lands shall be final. Clearly legible scale slips showing individual log volumes for each truck load for all products must be dated and submitted weekly. The State reserves the right to stop logging operations if scale slips are unnecessarily delayed.

(8) CUTTING

- A. Trees subject to this contract are marked with red paint. Notwithstanding State and Federal law, all trees marked are to be cut.
- B. Whole tree utilization is required. The following utilization standards shall apply wherever tree form and branching permit:
 - 1. Softwood sawlogs shall be utilized to a minimum 8" diameter inside bark (d.i.b.) top end.
 - 2. Hardwood sawlogs shall be utilized to a minimum 10" diameter inside bark (d.i.b.) top end.
 - 3. All material not suitable for use as sawlogs must be utilized as chips.
- C. Should the Purchaser unnecessarily cut, fell, destroy, injure or carry away unmarked merchantable trees, in the performance of his obligations, in the judgement of the Agent of the State, the Purchaser shall pay the State five (5) times the value of the trees so affected. Unmarked, unmerchantable trees which are unnecessarily cut or damaged shall be paid for at the rate of one dollar (\$1.00) each.
- D. Trees damaged during cutting and logging, whether merchantable or unmerchantable, shall be felled upon the request of the Agent of the State. All such merchantable trees shall be utilized.
- E. Felling of trees and other work pertaining to this operation shall be confined to the sale area and shall be done with due care to preserve the remaining growth from waste or damage.
- F. Tops and all trees root-sprung or hung-up as a result of this operation shall be lopped so that

no portion of the trees remain more than four (4) feet above ground level.

- G. All trees shall be sawed or cut down as near the ground as swell of roots and defects will permit, snow being removed if necessary to effect this result. All stumps not cut in accordance herewith and which should have been so cut, in the judgment of the Agent of the State, shall be paid for at the rate of one dollar (\$1.00) each.
- H. Harvesting equipment shall be restricted to a mechanical harvester equipped with a boom mounted saw head capable of cutting up to 18" DBH trees. The harvester must have a minimum boom reach of twenty (20) feet. Mechanically harvested stems must be initially felled completely in the designated skid trails. Trees too large to be cut mechanically may be felled manually using care to minimize damage to white pine regeneration.

(9) LOGGING; SKIDDING

- A. Unnecessary logging damage shall be cause for cancellation of this contract. Prior to completion of operations on the sale area, unmarked trees which have been cut or damaged during operations including construction of roads and yards shall be tallied by the Agent of the State and a charge made against the performance bond to compensate for such damage.
- B. The State reserves the right to restrict the use of any piece of equipment, if necessary in the judgement of the Agent of the State, to reduce or prevent damage to residual trees or premises. Skidding with crawler tractors equipped with blades and tree length skidding may be prohibited if damage will result.
- C. Location of all truck roads, skidding trails, and log yards shall be subject to the approval of the Agent of the State.
- D. Skid trails shall be cleared of tree growth more than four (4) inches in stump diameter before skidding begins; small growth may be pushed over. All merchantable trees cut in the clearing of skid trails shall be hauled to the log yard as soon as the trail can be used.
- E. Logs or tree length wood will not be skidded across water courses unless a bridge or culvert is built in compliance with the BMP'S, "Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire" to prevent silting of the water course.
- F. The Purchaser agrees to remove all slash and other obstructions resulting from the operation from established roads and trails.
- G. The Purchaser shall be required to water-bar skid trails as directed by the Agent of the State upon completion of the operation.

- H. The Purchaser shall contact the Agent of the State and make an appointment to discuss location of roads, trails, log yards and the provisions of this contract before cutting begins.
- I. The tops from felled trees shall not be left hanging in standing trees. All trees removed in road, log yard, and other construction clearings shall be completely felled and not left leaning.
- J. The Purchaser agrees to conduct operations reasonably to minimize soil erosion. Equipment shall not be operated when ground conditions are such that excessive damage will result. The Purchaser agrees that the kinds and intensity of erosion control work shall be adjusted to ground and weather conditions and the need for controlling runoff. Erosion control work shall be kept current immediately preceding expected seasonal periods of precipitation or runoff. If Purchaser fails to do seasonal erosion control work prior to seasonal period of precipitation or runoff, the Agent of the State may temporarily assume responsibility for the work and Purchaser's performance bond hereunder may be used by the Agent of the State to do the work. If needed for such work, Purchaser shall make additional deposits on request by the Agent of the State.
- K. All mechanically severed trees shall be layed down in designated skid trails prior to skidding.

(10) HAULING

- A. The Purchaser shall be responsible for the maintenance of truck roads used in this operation on the State tract involved.
- B. Existing roads and trails shall be left in a condition equal to or better than their condition prior to the start of the operation. To prevent damage, no hauling shall be allowed when roads are soft.
- C. The Purchaser shall be required to water-bar haul roads at the completion of the operation as directed by the Agent of the State.
- D. Where logging or road construction is in progress but not complete, unless agreed otherwise, Purchaser shall, before operations cease annually, construct temporary cross drains, drainage ditches, dips, berms, culverts or other facilities needed to control erosion.
- E. Hauling shall be restricted to Monday thru Friday only, during the winter snowmachine season.

(11) <u>SITE RESTORATION AND SANITATION</u>

A. Prior to contract termination, the Purchaser shall carry out site restoration or erosion control measures deemed necessary by the Agent of the State. These may include but not limited to

ditching, trail water-barring, and yard cleaning or smoothing.

- B. The Purchaser shall comply with all applicable laws concerning sanitation and disposal of wastes so as to prevent stream pollution and land littering. During the operation, equipment servicing involving oil changes, grease jobs, and oil waste shall be permitted only at a location prescribed in advance by the Agent of the State. All refuse including but not limited to cans, bottles, papers and oil resulting from this operation shall be removed from the State land or disposed of in an approved manner and at approved locations.
- C. As necessary to attain stabilization of roadbeds and fill slopes, Purchaser shall employ such measures as sidesloping, drainage dips and water-spreading ditches. After said road has served Purchaser's purpose, Purchaser shall give notice to the Agent of the State and remove ruts and berms, effectively block said road to normal vehicular traffic where feasible and build cross ditches and water bars as staked or marked by the Agent of the State.
- D. After log yards have served Purchaser's purpose, Purchaser shall ditch or slope them to permit water to drain or spread. Unless otherwise agreed, cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion.

(12) SAFETY; INDEMNIFICATION

- A. The Purchaser shall maintain all necessary safeguards for the safety of the public and the Purchaser's employees and be responsible for all injuries and property damage that may occur as a result of the Purchaser's fault or negligence in connection with this operation.
- B. The Purchaser shall defend, indemnify and hold harmless the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any persons, on account of, based on, resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Purchaser. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant shall survive the termination of this agreement.
- C. The Purchaser shall agree, without expense to the State, to promptly use and employ all force of men and equipment he has on the premises, or available in the vicinity, to extinguish all fires on said premises, or on surrounding land of the State and shall further exercise due care to prevent the start and spread of fires during the term of this contract.
- D. In the performance of this agreement the Purchaser is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Purchaser nor any of its officers, employees, or members are entitled to any of the benefits, worker's compensation or emoluments provided by the State to its employees. The Purchaser shall purchase and maintain such insurance as will protect him from claims under workmen's compensation acts and from any

other claims for damages for personal injury, including death, which may arise from operations under this agreement and in case any such work is sublet, the Purchaser shall require the subcontractor similarly to provide like insurance for all of the latter's employees to be engaged in such work. A copy of the appropriate insurance policy or policies shall be made available to the Director, Division of Forests and Lands at the time of signing of this contract.

(13) <u>STATUTORY REQUIREMENTS</u>

- A. The Purchaser shall comply with all applicable State and local laws, rules, and regulations in connection with operations under this contract.
- B. The Purchaser shall furnish a bond or other security to the town and be responsible for payment of the timber tax complying with all provisions of RSA 79. Required bonds and notices shall be filed and posted prior to start of operations.
- C. The Purchaser shall be responsible for compliance with RSA Chapter 149 regarding water pollution which also prohibits leaving slash in streams.
- D. The Purchaser shall be responsible for compliance with RSA 227 as amended regarding slash disposal in relation to property lines, roads, railroads, buildings, public waters and streams.
- E. All payments due under the terms of this contract will be governed by the provisions of RSA 80:7 which requires the Treasurer, State of New Hampshire, upon notification by the tax collector, to withhold payment of unpaid taxes from any funds due the Purchaser by the State, which may result from operations under this agreement.

(14) BIDDING INSTRUCTIONS

- A. Bids shall be made on a per thousand board feet (mbf) or other price per unit of product basis as specified on the bid form.
- B. Attached to this prospectus are two copies of a bid form. BIDS MUST BE SIGNED IN INK AND SUBMITTED IN DUPLICATE. Each form must be completed in a identical manner, showing a specified amount bid for each item.
- C. Bids MUST be accompanied by a CERTIFIED OR CASHIER'S check in the amount of \$2,000.00 made payable to "Treasurer, State of New Hampshire". Cash will not be accepted. All or part of this sum will be held initially as a bid bond to be retained by the State, for failure to execute a contract covering the specifications of this Prospectus. Upon execution of the contract, the sum will be held as a performance bond and returned to the Purchaser upon satisfactory fulfillment of the contract obligations. All deposits except that pertaining to the accepted bid will be returned as soon as practicable after the opening of the bids, together with a bid summary

and action taken.

- D. The bid should be detached and forwarded in the enclosed blue envelope marked Timber Sale Bid, Project P1-397 and addressed to Director, Division of Forests and Lands, PO Box 1856, Concord, New Hampshire 03302-1856.
- E. No bid shall be withdrawn after the opening of the bids without the consent of the Director, Division of Forests and Lands.
- F. The State reserves the right to reject any or all bids.
- G. The Commissioner of the Department of Resources and Economic Development reserves the right to waive any and all technicalities in regard to bidding procedure.
- H. Bidders are invited to be present at the opening of the bids.

Appendix F Continued

DATE: June 16, 1998

TRACT: Bear Brook State Park PROJECT NUMBER: P1-397

Mr. Philip A. Bryce, Director Division of Forests & Lands PO Box 1856 Concord, New Hampshire 03302-1856

In accordance with the specifications and agreement hereinbefore named. I offer for the aforesaid marked stumpage on the described area the following prices:

PRICE UNIT	SPECIES		PRODUCT	
\$	MBF	White Pine	Sawlogs	
\$	MBF	White Oak	Sawlogs	
\$	MBF	Red Oak	Sawlogs	
\$	MBF	Red Maple	Sawlogs	
\$	MBF	Misc. Hardwo	ood Sawlogs	
\$	TONS	Hardwood	Chips	
\$	TONS	Softwood	Chips	

NOTE: A certified or cashier's bank check in the amount of \$2,000.00 must accompany this bid. Please enclose both copies of bid, thank you.

NAME

ADDRESS

COMPANY

TELEPHONE

Sealed bids will be received until 2:00 P.M., Tuesday, June 30, 1998.

(Please remember to print your return address on the bid envelope.)

State of New Hampshire Department of Resources and Economic Development Division of Forests and Lands June 5, 1998

NOTICE OF TIMBER SALE

Bear Brook State Park, Allenstown, N.H. Project# P1-397

By authority granted under RSA 227-G:3 and 227-H:2, the New Hampshire Division of Forests and Lands is offering for sale to the highest bidder the following stumpage:

SPECIES	AVERAGE DIAMETER (inches)	AVERAGE HEIGHT (16-ft logs)	NUMBER OF TREES	SALE VOLUME (Bd.Ft.)
White Pine	16	3.0	1758	433,000
White Oak	14	1.0	158	8,700
Red Oak	14	1.0	93	5,900
Red Maple	14	1.0	45	2,900
Misc. Hardwood	13	1.0	3	200
Hardwood Chips	8	50 ft.	3,008	988 Tons
Softwood Chips	8	50 ft.	778	430 Tons

These estimated volumes are based on the International 1/4" Kerf Log Rule and the standard 128 cubic foot cord. Volume and quality of this stumpage are not guaranteed. Bidders are expected to examine the property and determine volumes, values, and operating conditions for themselves.

Harvesting equipment shall be restricted to a mechanical harvester equipped with a boom mounted saw head capable of cutting up to 18" DBH trees.

Payment for stumpage shall be required in advance of cutting on the basis of bid price per unit of product in five (5), approximately equal payments. Final settlement shall be determined from mill delivery scale.

This timber is located on 45 acres of the Bear Brook State Park in the town of Allenstown, New Hampshire.

Trees to be cut are marked with red paint. **THIS SALE WILL BE SHOWN ON Tuesday, June 16, 1998**. Interested parties may meet the Regional Forester at the snowmachine parking lot, on the south side of Deerfield Road in Bear Brook State Park, Allenstown, New Hampshire at **9:00 AM**. The Regional Forester in charge is Mr. Raymond M. Boivin and can be reached at (603) 271-3456. Bidding instructions, bid forms, return envelopes and a detailed prospectus describing the contract provisions of the sale may be obtained from the Regional Forester at the showing or by writing him or the Division of Forests and Lands, PO Box 1856, Concord, New Hampshire 03302-1856, Attention: Forest Management.

Sealed bids will be received until 2:00 P.M., Tuesday, June 30, 1998.